UNC IMPROVES ACCESS FOR THOSE IN NEED • CARDIOLOGY TAKES NEW DIRECTION

UNC Medical Bulletin

Spring 2007

A publication for alumni and friends
of the University of North Carolina at Chapel Hill School of Medicine and UNC Health Care

Focus on Teaching!

A new **'academy of educators'** program provides medical students an enhanced, more formal approach to learning

from the dean

Dear Friends and Alumni:

Nationally, medical schools and academic health centers like ours are trying to find new, creative ways to train more doctors. Eleven North Carolina counties and parts of 40 others in the rural east and west already now experience doctor shortages. However, an even more serious shortage is coming our way — and we need to do our part to get prepared.

In taking steps to address this growing shortage, we are reaching across the state. Under UNC President Erskine Bowles, we are exploring the possibility of partnering with our colleagues at the Carolinas HealthCare System and Carolinas Medical Center (CMC) in Charlotte to establish a Charlotte campus of this medical school.

North Carolina's population is projected to grow 37 percent by 2030. The number of North Carolinians age 65 or older is expected to increase 59 percent between 2004 and 2020 with the aging of the baby boomer generation. In addition, our state's Southern charm and beautiful natural resources make us the fourth most popular state for retirees.

At the same time, our state's doctors are getting older — 36 percent are age 50 or older. By 2030, that number is expected to reach 50 percent.

These projections led us to approach officials at Carolinas Medical Center with the idea of launching a Charlotte-based campus of the UNC School of Medicine. The Queen City is one of the largest cities in the United States without its own medical school.

With this still draft proposal, 50 additional students would complete their first two years of medical school at the UNC School of Medicine. They would then spend their third and fourth years in Charlotte.

Charlotte was a logical place for us to begin the conversation expanding our medical education efforts. Not only is the city home to the largest medical community in the state, it is a high-growth area with excellent existing health care and research facilities. CMC provides significant support to the UNC School of Medicine through the many CMC faculty members that serve as adjunct faculty for the university. In the past four years, about 1,000 students from the UNC School of Medicine have walked CMC's halls — and trained in its clinics — as part of their regular clinical rotations.

Despite the absence of a traditional medical school, Carolinas Medical Center serves as one of North Carolina's five state-designated academic medical center teaching hospitals (AMCTH). It is the only non-university-affiliated AMCTH in the state, and provides three to seven years of graduate medical training to residents who have recently graduated from medical school. CMC also conducts extensive medical and scientific research, and sponsors numerous degree programs for nurses and other allied health professionals.

Our state faces long-term physician shortages which cannot be successfully addressed without a significant increase in training capacity. While this will prove problematic for urban areas, North Carolina's rural areas will be hit the hardest when this shortage grows more acute. Our potential partnership with CMC is another example of our efforts to anticipate and serve the needs of all North Carolinians.

Sincerely,

Bill Roper

William L. Roper, MD MPH
Dean, UNC School of Medicine
Vice Chancellor for Medical Affairs
CEO, UNC Health Care
The University of North Carolina at Chapel Hill

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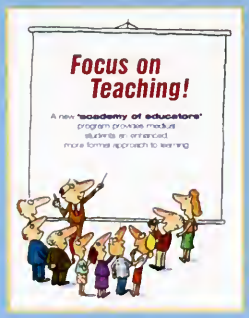

The School of Medicine has established a new program — The Academy of Educators — to enhance the learning experience of medical students.

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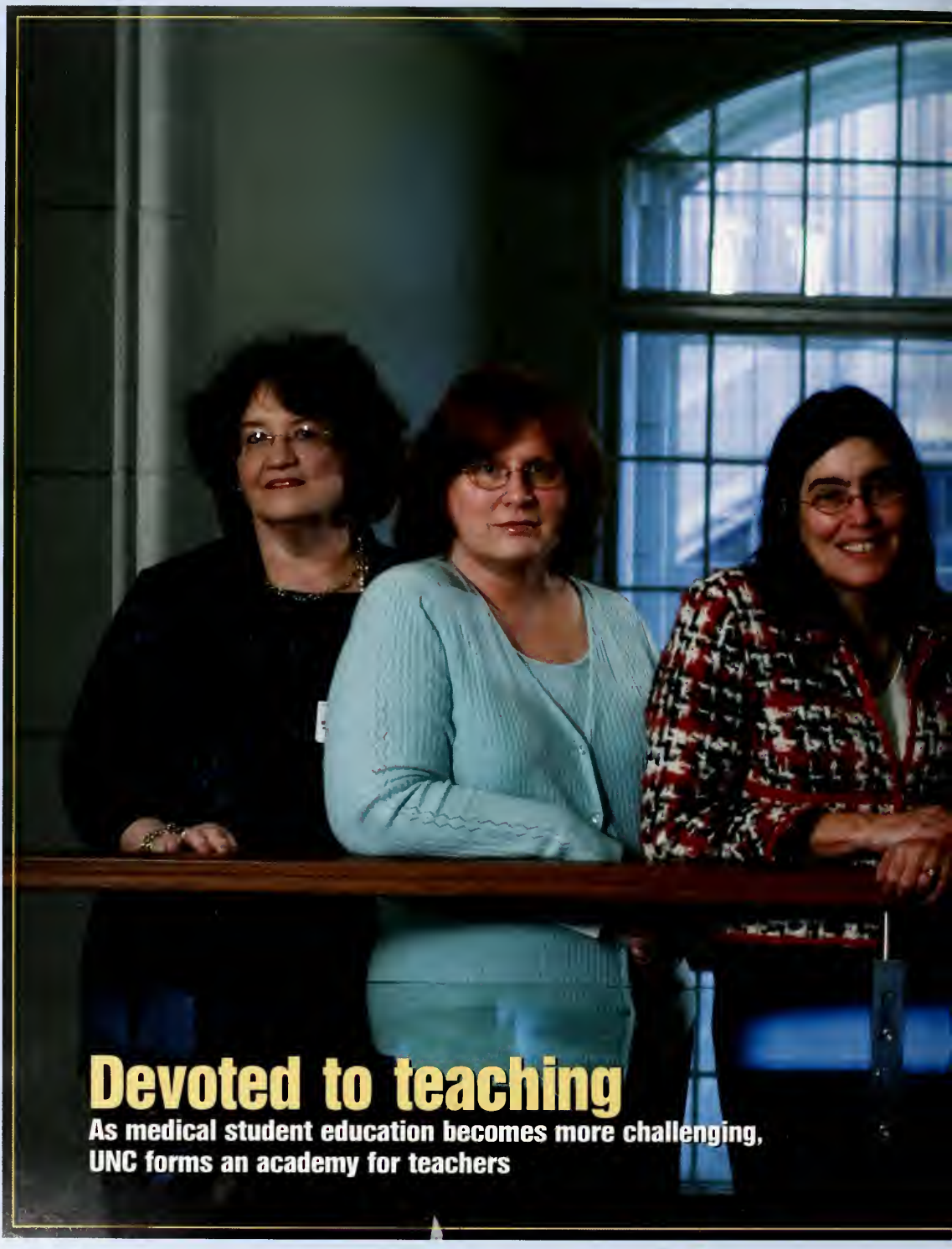

Devoted to teaching

As medical student education becomes more challenging, UNC forms an academy for teachers

Academy leaders, from left: Drs. Kathleen Rao, Kathryn Sutton, Etta Pisano, Cheryl McCartney, Alan Cross and Julie Byerley.

By Angela Spivey

If you are a third-year medical student doing a pediatrics clerkship, you need to observe children of all ages with a wide variety of problems — abdominal complaints, developmental delay, anemia.

Today, getting all those experiences can mean rotating with countless specialists. "The fact that physicians in tertiary care at UNC are becoming more sub-specialized means that we have to be more and more purposeful in our teaching of medical students," said Julie S. Byerley, MD, assistant professor of pediatrics and Medical Alumni Distinguished Teaching Professor. "Now each individual attending physician knows a lot more about a smaller number of things, so students have to be exposed to a broader variety of teachers."

But students still need the continuity of one teacher who knows them, Dr. Byerley said. That's why third-year medical students on the pediatrics clerkship at UNC have a designated "Teach Attending" — an attending physician with protected time to focus on teaching medical students on the inpatient service. While the clinical attending is writing notes, doing research, or performing procedures, the teach attending is talking with students to ensure they understand the fundamentals involved in the patient's care.

"We did this because the clinic attendings were so busy with patient care and other responsibilities, we needed to assure that student teaching was not neglected," Dr. Byerley said. Similar programs are in place in the departments of Surgery and Family Medicine.

This is just one example of how medical education has become more complicated. "We have to have faculty from different disciplines working together, and clinicians and basic scientists working together, to create efficient ways to convey the material," said Cheryl F. McCartney, MD, executive associate dean for medical education.

All this means that teaching takes more effort, more time. In recognition of that, the UNC School of Medicine is forming an organization dedicated to recognizing and supporting excellence in medical student education — the Academy of Educators.

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A scholarly approach to education

"We needed to have a special set of people who were building their careers on being scholarly about education. Once we do that, we need to find ways to support their career paths and to recognize their accomplishments," Dr. McCartney said.

"The goal of the academy is to give greater support and visibility to the education mission of the school," said Alan Cross, MD, professor of Social Medicine and one of the co-directors of the academy. The academy will accomplish that by providing support for efforts to develop new curricula, for faculty development, and for mentoring, Dr. Cross said. Fellows elected to the academy may also get the chance to make policy recommendations for ways to improve the education mission at the School of Medicine.

Dr. Cross and academy co-director Kathleen Rao, MD, have received 99 nominations, which come from department chairs. Decisions will be made after a review by a selection committee, Dr. Cross said, and the goal is that the academy will meet for the first time in April 2007. Drs. Cross and Rao plan to seek nominations and add new fellows each year.

Nominees are likely to be those who enjoy classroom or bedside teaching, as well as those who have already influenced teaching here at UNC and nationally by developing new curricula, by working with others to implement curricula, or by evaluating curricula or student performance.

By bringing such people together in an organized, formal way, the academy is an effort to ensure UNC continues to take a more "scholarly approach" to medical education, Dr. McCartney said. "We need people who are knowledgeable about the specific teaching methods, educational technologies, and methods of testing the students' knowledge, all of which have become much more sophisticated. We want to include faculty who have experience as educational administrators and leaders, such as course directors, program directors, departmental vice chairs for education, and associate deans. Through the Academy, we

Dr. Byerley, bottom center, with students. "We needed to assure that student teaching was not neglected," she says.

will encourage and mentor faculty to disseminate their creative education work to national peers through presentations and publications."

A nationwide trend

Medical schools at Harvard and the University of California at San Francisco formed the earliest teaching academies, Dr. McCartney said. The number of medical schools creating such organizations is increasing, according to a survey conducted by Charlene Dewey, MD, of Baylor University and colleagues and published April 2005 in the journal *Academic Medicine*. That survey of 97 schools found that 19 schools, or 21 percent, had formed an academy of educators or other formal organization that enhances teaching at the institution and recognizes accomplished educators.

At UNC, as at other schools, teaching increasingly vies with research and clinical care for time, attention, and money. While all three are important, the academy is an effort to make sure that teaching remains a priority.

"Over the past decade, there has been an explosion of research funding and activity and a vast expansion of the clinical care provided by the faculty," Dr. Cross said. "But there's been no comparable expansion in teaching activities and support for education. State dollars, which have always

been generous to this medical school, have not shrunk dramatically, but even if they stay level, they have become a smaller and smaller proportion of the total budget as research and clinical work increases."

The academy would expand upon existing efforts to reward and promote teaching, such as the Medical Alumni distinguished teaching professorships. These endowed four-year term professorships supported by the Medical

Dr. Byerley, left, with student Nick Tinkham, examines patient Esmerelda Mendoza.

Foundation's Loyalty Fund recognize faculty who have shown excellence in teaching and gives them access to funds they can use to improve their teaching further. "It gives us a way to support them so they can go to a national meeting or purchase learning materials or fund a project they would like to do," Dr. McCartney said. In addition, the Teaching Scholars Program helps faculty develop their teaching and assessment skills. Faculty who participate in the year-long program attend seminars and pursue a research project on an educational topic.

Election to The Academy of Educators will recognize faculty for teaching excellence. But with the honor will come responsibility.

With recognition comes responsibility

Election to The Academy of Educators will recognize faculty for teaching excellence. But with the honor will come responsibility. For example, fellows will serve as mentors to all School of Medicine teachers, not just members of the academy. A fellow might give another teacher a peer evaluation, provide training in a new teaching technique, help another teacher prepare for a promotion review, or simply allow another faculty member to observe their teaching. "The resources of the academy will be available to all of us," Dr. McCartney said.

Fellows may also work to ensure that teaching accomplishments aren't overlooked during promotion or tenure reviews. "We would anticipate trying to get the promotions committee to include members of the academy so as to make sure that issues of education excellence are taken into account when decisions are made about promotions and tenure," Dr. Cross said.

Dr. McCartney added, "By improving mentoring for teaching and peer review of teaching, our Academy will assist all faculty in achieving their promotions. Beyond that, for those faculty who want to focus their careers on excellence in education, the Academy will support them in developing their peer reviewed scholarship and national reputation, which they need to be promoted in our tenure track. Although our promotion and tenure policy currently does offer the option for faculty to be promoted in the tenure track for excellence in education, until now, only a few faculty have succeeded."

If resources allow, the Academy may also offer fellows small grants to conduct pilot projects to develop new curricula or teaching methods. "People aspiring to do one of these scholarly projects could at first get their feet wet by doing a project here at home. Then they would have School of Medicine pilot data and a track record to use to go to a funding agency," Dr. McCartney said.

The UNC School of Medicine has grown to include more than 640 medical students and 1,300 full-time faculty. But students still need mentors. "We can't get along without our teachers," Dr. McCartney said. "We have alumni who fondly remember when they could get to know their teachers over a long period of time. For faculty who wish to do it, we have to make an effort to give them the time to be personal mentors to our students, and to teach them how to be effective at it."

A freelance writer based in North Carolina, Angela Spivey specializes in science and health.

The innovative 'risk-taker'

The chief of Cardiology now works alongside one-time mentor – while proving himself a mentor to new physicians

By Tom Hughes

When he was 29 years old, Cam Patterson, MD, was asked to become chief resident in internal medicine at Grady Memorial Hospital in downtown Atlanta.

Among the residencies sponsored by Emory University, this was a big deal, because the chief resident at Grady also served as chief resident for all four Emory-affiliated hospitals. And at the time, Dr. Patterson was the youngest person ever offered the position.

Then, 12 years later, in 2005, he was asked to become chief of the Division of Cardiology at the University of North Carolina at Chapel Hill, after establishing himself as both a brilliant researcher and highly effective administrator in his role as founding director of the Carolina Cardiovascular Biology Center.

At 41, Dr. Patterson was not the youngest to be UNC's chief of cardiology; Ernest Craige, MD, was 34 when he founded the division in 1952. However, compared to his counterparts at academic medical centers across the country, Dr. Patterson is one of the youngest cardiology chiefs.

How did he reach these two milestones at such relatively early ages? To hear Dr. Patterson tell the story, the guidance of excellent mentors at every critical step along the way was a key ingredient in his recipe for success.

The first of these was a cardiologist who was a friend of Dr. Patterson's family when he was growing up in the Gulf Coast city of Mobile, Ala. Dr. E. Russell "Barney" March Jr. "was an enormously influential gentleman" on Dr. Patterson during his early years and all the way through high school, he said.

"He taught me the role that physicians can play," Dr. Patterson said. "He also stressed that it was important for a physician to be a well-rounded person."

By the time he finished high school, Dr. Patterson said, he had "a pretty good idea that medicine was the direction I was headed in." He chose to do his undergraduate studies at Vanderbilt University, in no small measure because he was offered a Harold Stirling Vanderbilt Scholarship. At the time, only five students at Vanderbilt per year were awarded the prestigious full scholarship.

"The Harold Stirling Vanderbilt Foundation not only provided scholarships for people to go to Vanderbilt, they had a wonderful program to mentor people through the undergraduate process and really created a sense of brotherhood among the people who were Harold Stirling Vanderbilt scholars," Dr. Patterson said.

When he was in high school, Dr. Patterson said, he viewed scientific research as a mostly mechanical and intellectually unrewarding endeavor. His view began to change,

Cam Patterson, MD

Hometown: Mobile, Ala.

Undergraduate education: Vanderbilt University, Nashville, Tenn., B.A., 1985

Medical education: Emory University School of Medicine, M.D., 1989, followed by a residency in internal medicine at Emory University Affiliated Hospitals. He then served as chief resident in internal medicine at Grady Memorial Hospital in Atlanta, as a research fellow in cardiovascular biology at the Harvard School of Public Health and as a clinical fellow in cardiology at the University of Texas Medical Branch at Galveston.

Primary academic appointments: University of Texas Medical Branch at Galveston, 1996-2000; University of North Carolina at Chapel Hill School of Medicine, 2000-present. He joined the UNC faculty as an associate professor with tenure in the departments of Medicine, Pharmacology and Cell and Developmental Biology. He was promoted to chief of the Division of Cardiology in 2005. At UNC he also holds the titles of Ernest and Hazel Craige Distinguished Professor of Cardiovascular Medicine, Director of the Carolina Cardiovascular Biology Center and Associate Chair for Research in the Department of Medicine.

Noteworthy professional accomplishments: Dr. Patterson was the founding director of the Carolina Cardiovascular Biology Center at UNC. Based on PubMed citations to his research publications, he is in the top 1 percent of authors in the fields of biology and biochemistry. He holds patents on six inventions. Examples of these inventions include an endothelial-cell specific promoter, a polypeptide that interacts with heat shock proteins, and a method of modulating angiogenesis.

Family: Married to Kristine Blair Patterson, MD, who is an assistant professor in the Division of Infectious Diseases at UNC. They have three children: Celia, 5; Anna, 2; and Graham, 1.

Personal interests: Dr. Patterson plays guitar, mandolin and lap steel guitar. He also enjoys cooking, exercise and catching an occasional concert at the Cat's Cradle in Carrboro.

Most poorly kept secret: Dr. Patterson likes to include the titles of popular songs in the titles of his research publications, when journal editors let him get away with it. One example: "Tiny dancers: the integrin-growth factor nexus in angiogenic signaling," which was published in the *Journal of Cell Biology* in 2002. He has two framed copies of this article on the wall in his office. One is autographed by Elton John; the other is signed by Bernie Taupin. (Elton John and Bernie Taupin are co-authors of the song, "Tiny Dancer.")

however, when he took part in a special program through Vanderbilt's Department of Psychology that allowed undergraduates to spend their last two years focusing on a specific research project. For his own project, he conducted a series of experiments looking at behavioral responses to various medications in rats.

"For reasons that only someone who enjoys research will understand, I really got a thrill out of coming in in the middle of the night, or coming in on the weekend, and taking care of my rats, and asking interesting questions," he said. "It was one of those moments in your life when the light bulb really goes off. It forced me to think about how I could combine my ideals of the traditional physician with the excitement of doing research."

His undergraduate thesis, mentored by Dr. William Caul, was approved with highest honors. Then he was off to medical school at Emory University where, in his fourth year, Dr. Patterson met the man who would become the most influential mentor in his career, Marschall Runge, MD, PhD, now chair of the Department of Medicine at UNC.

Dr. Runge soon noticed many promising qualities in his younger protégé.

"When I came to Emory, Juha Kokko (the chair of Medicine at the time) told me to 'Keep an eye out for Cam Patterson,' " Dr. Runge said.

"After my first encounter with Cam, when he quoted an obscure article I'd never heard of, published in the *Western Journal of Medicine*, I went back to my office and looked it up, thinking he'd made it up. But it was true. After a few more like experiences, I was a believer, like Kokko. From that point on, Cam showed that he was an incredibly innovative thinker, was more than willing to take risks."

A good example, Dr. Runge said, was Dr. Patterson's decision to forego his plan of pursuing more clinically oriented research in cardiac transplantation for training with Edgar Haber in basic molecular mechanisms in cardiovascular biology at the Harvard School of Public Health.

"Haber himself told me that Cam was one of his top three trainees ever, quite a statement when one considers that Haber mentored tens of division chiefs, center directors, chairs, deans and other prominent academicians in his career," Dr. Runge said.

For his part, Dr. Patterson says, "My relationship with Marschall is clearly one of the two or three most important medical relationships that I have. I met Marschall when I was a fourth-year medical student and got to know him very well when I was resident in the internal medicine program at Emory. Marschall and I had many discussions about cardiology and about my career plans."

As a result of those discussions, which also included Dr. Kokko, Dr. Patterson headed to Harvard after completing his residency at Emory. At Harvard Dr. Patterson was a research fellow in the Cardiovascular Biology Laboratory headed by Edgar Haber, MD, who had been Dr. Runge's mentor when Dr. Runge was a cardiology fellow at Massachusetts General Hospital.

The original idea behind this plan was that Dr. Patterson would return to Emory and join the faculty after completing his research fellowship at Harvard. But by that time, Dr. Runge had left Emory for the University of Texas Medical Branch at Galveston, and he offered Dr. Patterson a clinical fellowship and faculty position there. After some initial hesitation, Dr. Patterson agreed to take the offer, and joined the faculty in Galveston in 1996.

"With Dr. Haber's blessing," Dr. Runge recalled, "Cam came to Galveston, becoming the only person I know who simultaneously completed training in clinical cardiology and ran a major research program."

Dr. Patterson remained in Galveston until 2000, when both Dr. Runge and Dr. Patterson were offered positions at UNC. Dr. Runge became chair of the Department of Medicine, while Dr. Patterson was hired as an associate professor with tenure and appointments in the departments of medicine, pharmacology and cell and developmental biology. Dr. Patterson was also charged with founding and developing the

Carolina Cardiovascular Biology Center. This was a very impressive career move, especially for a 35-year-old who had completed his clinical fellowship in cardiology less than two years earlier.

Dr. Patterson's accomplishments since then have more than justified the faith that was placed in him. Starting with a budget of $0, he had grown the center's budget to $13 million by fiscal year 2006, with 99 percent of that funding coming from extramural sources. The center has also helped recruit 23 new faculty to UNC, at minimal cost to the School of Medicine.

This administrative experience would serve him well once he was promoted to chief of cardiology, where he faced a daunting challenge. The division was not performing well financially and had lost almost $5 million in the 3 years before Dr. Patterson was named chief.

But for fiscal year 2007 the division was able to submit a balanced budget, representing a nearly $2 million a year turnaround in just 12 months. During the same period, the division experienced impressive growth in interventional procedures and cardiac surgical procedures, at a time when many other cardiology programs were suffering declines in these areas. Dr. Patterson is quick to point out that credit for this turnaround does not belong to him alone, but must be shared with many others who worked very hard to make it happen.

In addition, his research productivity since joining the UNC faculty has been very impressive. Based on citations to his research in PubMed, he is in the top 1 percent of authors in the fields of biology and biochemistry. He also holds patents on six inventions. Examples of these include an endothelial-cell specific promoter, a polypeptide that interacts with heat shock proteins, and a method of modulating angiogenesis. Dr. Patterson and colleagues in his laboratory were the first to clone the gene CHIP, while searching to discover genes that might regulate the way heart muscle responds to stress.

He was won many awards during his career, including the Ignacio Chavez Young Investigator Award, given by the Interamerican Society of Cardiology (1997); the 2002 Phillip and Ruth Hettleman Prize for Artistic and Scholarly Achievements by Young Faculty (2002), given by UNC; and the Established Investigator Award, given by the American Heart Association (2003-2008). Dr. Patterson also serves on the editorial or advisory boards for the major journals in his field, including Circulation, Circulation Research, the Journal of Molecular and Cellular Cardiology, Arteriosclerosis, Thrombosis, and Vascular Biology, and *The Journal of Thrombosis and Haemostasis*.

Fittingly enough for someone who gives so much credit to his mentors for guiding him to success, Dr. Patterson now serves as a mentor himself to many UNC medical students, PhD candidates and faculty researchers. Those he has mentored at UNC have, collectively, won more than two dozen awards. A few examples include several NIH National Research Service Awards, the Clinical Research Development Award of the American Society of Clinical Oncology, and the Franklin Martin Faculty Research Fellowship of the American College of Surgeons.

His plans for the future are focused on maintaining the areas of excellence that already exist within the Division of Cardiology while simultaneously establishing and developing new areas of excellence, Dr. Patterson said.

"We have an important, critical mission for the state, a safety net mission," he said. "But we also have to be sure that we deliver the very best of care to our patients and train our medical students, residents and fellows and do research that garners national and international recognition."

"We have an important, critical mission for the state, a safety net mission," he said. "But we also have to be sure that we deliver the very best of care to our patients and train our medical students, residents and fellows and do research that garners national and international recognition."

"We have to do all of those things at the same time, and we have to do them all very well, because the expectations here are all always going to be extremely high," he said.

Drug combination slows progression of treatment-resistant bone marrow cancer

Combining a newly formulated drug with one that is already a standard treatment slows the progression of multiple myeloma, an advanced cancer of the bone marrow cells, according to a clinical trial led by a UNC School of Medicine researcher.

The phase III trial included 646 patients from 18 countries with relapsed or refractory multiple myeloma, a condition in which cancerous cells continue to multiply despite treatment. Patients in the trial were randomly assigned to receive the drug bortezomib (Velcade), standard therapy for relapsed multiple myeloma, or a combination of Velcade and Doxil, a chemotherapy drug (doxorubicin) delivered via liposomes, or microscopic fat bubbles.

An interim analysis of study participants who received the combination treatment showed a better response in the combination group than in participants who received standard treatment. The combination group's median time to progression – the time interval between the response to treatment and the time the disease starts to show evidence of growing or recurring – was 9.3 months, while those on Velcade alone progressed after 6.5 months.

ORLOWSKI

The three-month improvement is an important step forward in treatment for multiple myeloma, said Dr. Robert Orlowski, Lenvel Lee Rothrock associate professor in the department of hematology/oncology at the School of Medicine, and a member of the UNC Lineberger Comprehensive Cancer Center.

Dr. Orlowski will present the trial's early results on Monday (Dec. 11), at the meeting of the American Society of Hematology in Orlando, Fla. The study was supported by Johnson & Johnson, which owns Ortho Biotech, the maker of Doxil, and also has a financial interest in Velcade.

"The data for time to progression were so positive and encouraging that we decided to announce this information earlier than anticipated so more people could be aware of the benefits of this combination," said Dr. Orlowski.

"This study establishes that this combination is one of the standards of care for relapsed, refractory multiple myeloma," Dr. Orlowski said. "It does provide some added hope for patients and their families."

The interim analysis also showed an early trend toward increased survival for patients taking the combination treatment, Dr. Orlowski said. Additional data on survival and the complete results of this analysis, as well as other factors such as quality of life, will be reported at a later date.

More than 11,000 people in the United States will die of multiple myeloma in 2006, according to the American Cancer Society. Because it affects white blood cells, multiple myeloma suppresses the immune system, so patients can develop sometimes fatal infections. Other complications include kidney failure, bone pain, anemia, and bleeding.

Doxil is a liposmal version of an older drug, doxorubicin, which means the drug is encapsulated in a microscopic pouch made of lipids, or fats. The formulation seems to produce fewer cardiac side effects and is more convenient to administer.

Dr. Orlowski and others first found that doxorubicin and Doxil may complement Velcade in studies of cells in culture, and of mice. "We've been able to take findings from the laboratory and move them on to patients in early, phase I clinical trials, and now in this phase III trial," Dr. Orlowski said. "It's an excellent example of how support of basic and translational laboratory research can, in a short time period, result in tangible benefits to patients."

Other investigators were Sen H. Zhuang, Trilok Parekh and Liang Xiu, all of Johnson and & Johnson Pharmaceutical Research & Development, and Jean-Luc Harousseau of University Hospital Hotel-Dieu, Nantes, France.

UNC scientists solve mystery of how largest cellular motor protein powers movement

Scientists now understand how an important protein converts chemical energy to mechanical force, thus powering the process of cell division, thanks to a new structural model by UNC researchers.

The structural model helps solve a scientific mystery: how the protein dynein fuels itself to perform cellular functions vital to life. These functions include mitosis, or cell division into identical cells.

Dynein uses energy derived from ATP, or adenosine triphosphate, a molecule that is the principal form of energy for cells. The lack of a comprehensive and detailed molecular structure for dynein has kept scientists largely in the dark about how the protein converts ATP into mechanical force, said Dr. Nikolay V. Dokholyan, assistant professor of biochemistry and biophysics in the UNC School of Medicine and a member of the UNC Lineberger Comprehensive Cancer Center.

Dokholyan said the dynein puzzle is similar to figuring out how auto engines make cars move. "You have an engine up front that burns gas, but we didn't know how the wheels are made to move."

Dr. Timothy Elston, associate professor of phar-

macology and director of the School of Medicine's bioinformatics and computational biology program, explains further. "One of the unknowns about dynein was that the molecular site where chemical energy is initially released from ATP is very far away from where the mechanical force occurs. The mechanical force must be transmitted over a large distance."

DOKHOLYAN

The study was published online Nov. 22 in the *Proceedings of the National Academy of Sciences Early Edition.* The work was supported in part by grants from the Muscular Dystrophy Association and the American Heart Association.

Using a variety of modeling techniques that allowed resolution at the level of atoms, Adrian W.R. Serohijos, a graduate student in Dokholyan's lab and first author of the study, identified a flexible, spring-like "coiled-coil" region within dynein. It couples the motor protein to the distant ATP site.

"This dynein coiled-coil was completely missing from all previous studies. We saw it could allow a very rapid transduction of chemical energy into mechanical energy," Dokholyan said.

Conversion to mechanical energy allows dynein to transport cellular structures such as mitochondria that perform specific jobs such as energy generation, protein production and cell maintenance. Dynein also helps force apart chromosomes during cell division.

"Dividing cells must separate their chromosomes and something has to generate the force to move chromosomes apart. Dynein provides the mechanical energy to do that," Doholyan said.

While the research offers no immediate application to human disease, the authors noted that mutations of dynein have been implicated in some neurodegenerative and kidney disorders. Dokholyan pointed out that disruption of dynein's interaction with a particular regulator protein causes defects in nerve cell transmission and mimics the symptoms of people with amyotrophic lateral sclerosis (ALS).

Study co-authors include Dr. Feng Ding, research associate in biochemistry and biophysics, and Yiwen Chen, graduate student in physics and astronomy.

Resurgence and spread of syphilis in China is a rapidly increasing epidemic

The resurgence and spread in China of syphilis, an infection eliminated there from 1960 to 1980, represents a rapidly increasing epidemic calling for urgent intervention, according to authors of a new report documenting rising infection rates.

"Syphilis has returned to China with a vengeance. The data demonstrates a syphilis epidemic of such scope and magnitude that it will require terrific effort to intervene," said Myron S. Cohen, MD, the J. Herbert Bate distinguished professor of medicine, microbiology and immunology, and public health, and director of the Center for Infectious Diseases at the University of North Carolina at Chapel Hill School of Medicine.

Dr. Cohen and co-authors from China collected and assessed data from China's national sexually transmitted disease (STD) surveillance system and sentinel site network. The total incidence of syphilis in all of China's counties increased from less than 0.2 cases per 100,000 people in 1993 to 6.5 cases per 100,000 in 1999, the study shows. Of the three categories of disease – primary, secondary and tertiary – the first two represented 5.7 cases per 100,000 people in 2005. This latter incidence is substantially higher than in most developed countries, including the U.S., which reported 2.7 cases of primary and secondary syphilis in 2004, the researchers note.

The results appeared in the Jan. 13, 2007, issue of the journal Lancet. The research was supported by special funding from the National Institutes of Health Fogarty-Ellison Fellowship and the UNC Center for AIDS Research.

Also alarming is the rate of congenital syphilis, Dr. Cohen said, which has increased from 0.01 cases per 100,000 live births in 1991 to 19.68 cases in 2005 – an average yearly rise of 71.9 percent. Congenital syphilis occurs when a pregnant woman with syphilis passes the infection to her baby in the womb. Many cases result in miscarriage or stillbirth, and surviving babies may have serious problems of the brain, liver, and other organs.

COHEN

The study authors link the rise in syphilis infection rates to economic reforms and globalization in China. These changes have led to income gaps and a cultural climate that favors re-emergence of prostitution due to a substantial majority of men and a large migrant population of male workers, the report says. Changing social practices such as people experimenting with sex at earlier ages and before marriage, as well as increasing costs of individual health care, also contribute.

Syphilis was first recognized in mainland China in 1505. By the time the Communist party assumed power in 1949, "the Chinese were suffering one of the biggest syphilis epidemics in human history," the authors said. Mao Zedong and his government made syphilis treatment and prevention a priority and launched a prolonged campaign beginning in 1952 to eliminate STDs, Dr. Cohen said. By 1964, syphilis was rare and the infection virtually eliminated until China opened its international borders in the early 1980s.

The virtual absence of syphilis in China for 20 years means the general population of young, sexually active individuals has no natural immunity to the disease, according to the authors. "Sexually active individuals would be completely susceptible to this infection," the report states. Dr. Cohen also notes that syphilis also increase the risk of both transmitting and getting infected with HIV, the virus that causes AIDS.

Dr. Cohen, who has worked in China since 1979, designed and planned the research along with co-author Dr. Xiang-Sheng Chen of the National Center for STD Control in

Nanjing. Dr. Cohen said the development of longstanding collaborations with the center helped make the report possible.

"This report helps to demonstrate the openness with which China is trying to approach epidemics of infectious diseases. The data we now have provides important clues as to where the authorities in China should put their resources," Dr. Cohen said.

A "formal and aggressive" China Syphilis Working Group has formed through partnerships involving UNC, China's National Center for STD Control, the World Health Organization, the United Nations Center for Disease Control and the London School of Hygiene, Dr. Cohen said.

Other co-authors with Chen and Cohen are Drs. Zhi-Quiang Chen, Guo-Cheng Zhang, Xiang-Dong Gong, Xing Gao, Gua-Jun Liang, Xiao-Li Yue and Mr. Charles Lin, all from the National Center for STD Control, Chinese Academy of Medical Sciences and Peking Union Medical College. Lin is also a student at the University of California, San Francisco School of Medicine and an NIH Fogarty-Ellison Fellow funded through UNC-Chapel Hill.

Higher occurrence of Parkinson's linked to low LDL cholesterol

People with low levels of LDL cholesterol are more likely to have Parkinson's disease than people with high LDL levels, according to UNC researchers.

LDL stands for low-density lipoprotein cholesterol; low levels of LDL cholesterol are considered an indicator of good cardiovascular health. Earlier studies have found intriguing correlations between Parkinson's disease, heart attacks, stroke and smoking.

"People with Parkinson's disease have a lower occurrence of heart attack and stroke than people who do not have the disease," said Dr. Xuemei Huang, medical director of the Movement Disorder Clinic at UNC Hospitals and an assistant professor of neurology in the UNC School of Medicine. "Parkinson's patients are also more likely to carry the gene APOE-2, which is linked with lower LDL cholesterol." And for more than a decade, researchers have known that smoking, which increases a person's risk for cardiovascular disease, is also associated with a decreased risk of Parkinson's disease.

HUANG

These findings led Dr. Huang to examine whether higher LDL cholesterol might be associated with a decreased occurrence for Parkinson's disease, and vice versa. "If my hypothesis was correct," she said, "lower LDL-C, something that is linked to healthy hearts, would be associated with a higher occurrence of Parkinson's."

The results of Dr. Huang's study, published online Dec. 18 by the journal Movement Disorders, confirmed her hypothesis. "We found that lower LDL concentrations were indeed associated with a higher occurrence of Parkinson's disease," Dr. Huang said. Participants with lower LDL levels (less than 114 milligrams per deciliter) had a 3.5-fold higher occurrence of Parkinson's than the participants with higher LDL levels (more than 138 milligrams per deciliter).

Dr. Huang cautioned that people should not change their eating habits, nor their use of statins and other cholesterol-lowering drugs, because of the results. The study was based on relatively small numbers of cases and controls, and the results are too preliminary, she said. Further large prospective studies are needed, Dr. Huang added.

"Parkinson's is a disease full of paradoxes," Dr. Huang said. "We've known for years that smoking reduces the risk of developing Parkinson's. More than 40 studies have documented that fact. But we don't advise people to smoke because of the other more serious health risks," she said.

Research funding was provided by the National Institute on Aging, the Intramural Research Program of the National Institute of Environmental Health Sciences and the General Clinical Research Center at UNC Hospitals.

Dr. Huang and her colleagues recruited 124 Parkinson's patients who were treated at the UNC Movement Disorder Clinic between July 2002 and November 2004 to take part in the study. Another 112 people, all spouses of patients treated in the clinic, were recruited as the control group.

Fasting cholesterol profiles were obtained from each participant. The researchers also recorded information on each participant's gender, age, smoking habits and use of cholesterol-lowering drugs. Huang notes that the study also found participants with Parkinson's were much less likely to take cholesterol-lowering drugs than participants in the control group. This, combined with the findings about LDL cholesterol, suggests two questions for additional study, Dr. Huang said.

"One is whether lower cholesterol predates the onset of Parkinson's. Number two, what is the role of statins in that? In other words, does taking cholesterol-lowering drugs somehow protect against Parkinson's? We need to address these questions," she said.

Dr. Huang's co-authors include Dr. Richard B. Mailman, Jennifer L. Woodard, Peter C. Chen, and Drs. Dong Xiang, Richard W. Murrow and Yi-Zhe Wang, all of the UNC School of Medicine. Additional co-authors include Dr. Honglei Chen of the National Institute of Environmental Health Sciences and Drs. William C. Miller and Charles Poole, both from the department of epidemiology in the UNC School of Public Health.

40s

Ira Abrahamson, CMED '46, is a retired professor emeritus of ophthalmology now living in Longboat Key, Fla.

Dr. Abrahamson finished his medical degree in 1948 at the University of Cincinnati College of Medicine. In the beginning of Dr. Abrahamson's career as an ophthalmologist, he performed eye surgeries in the Army. Many of his surgeries were on young men whose eyes were either turning in (esotropia) or turning out (exotropia). Dr. Abrahamson's interest in vision-screening was sparked when he realized that although he may have improved their eye alignment, the results would have been far better if the misalignment (strabismus) had been detected and treated in childhood. The condition commonly known as "lazy eye" or amblyopia, is the leading cause of preventable blindness in children. If treated by ages 6 or 7, vision can be corrected. If left untreated, amblyopia can cause permanent vision loss and even blindness. For this reason, Dr. Abrahamson wanted to create awareness of early detection of amblyopia by developing and implementing vision-screening programs everywhere. His dream was made a reality when his mother-in-law left him money to establish a pediatric eye institute if he would match the funds. Dr. Abrahamson graciously answered this with giving an endowment to Cincinnati Children's. This generous funding allowed for the development of the Abrahamson Pediatric Eye Institute (APEI) at Cincinnati Children's Hospital Medical Center, within the Department of Pediatric Ophthalmology.

70s

Lynn Wesson, MD '79, is living in Hillsborough, N.C., and working for Easter Seals/ASAP as a psychiatrist on Assertive Community Treatment Teams in Burlington and Yanceyville, N.C.

00s

Jeremy P. Moore, MD '05, was named Intern of the Year by the National Naval Medical Center in Bethesda, Md., for the 2005-06 program year.

Deaths

Clayton E. Wheeler, MD '41, died February 4, 2007. He received his M.D. degree from the University of Wisconsin in 1941. Dr. Wheeler was a 1st Lieutenant in the Army Medical Corps between his residency work in medicine and dermatology at the University of Michigan from 1942-1951. From 1951-1962, he worked as an Associate Professor and later, a Professor of Dermatology and Syphilology at the University of Virginia. Dr. Wheeler joined the University of North Carolina faculty in 1961 as a Professor of Dermatology and in 1972, he was appointed the first Professor and Chairman of the Department of Dermatology. Dr. Wheeler worked in patient care until 2002 and worked with the UNC School of Medicine until 2004.

WHEELER

Dr. Wheeler was a leader in Dermatology not just at the University of North Carolina, but nationwide. He served as president of the Society for Investigative Dermatology from 1974-1975, president of the Association of Professors of Dermatology from 1975-1976, president of the American Board of Dermatology from 1978-1979 and president of the American Academy of Dermatology from 1984-1985.

Throughout his lifetime, he was honored with many awards including the University Mentor Award for Lifetime Achievement in 2005 at UNC. Previous awards include The UNC School of Medicine and Medical Alumni Association Distinguished Service Award in 1997, Masters in Dermatology from the American Academy of Dermatology in 1993, the Gold Medal Award from the American Academy of Dermatology in 1993 and the Rothman Gold Medal Award from the Society for Investigative Dermatology in 1979. The Clayton E. Wheeler, Jr. Distinguished Professorship was created in 1991 by the UNC School of Medicine in honor of Dr. Wheeler's outstanding work.

Rudy W. Barker, MD '67, died January 18, 2007. His last residence was Durham, N.C. and his specialty was obstetrics and gynecology.

Archie Graham Davis, MD '72, died June 15, 2006, of pancreatic carcinoma. Dr. Davis was a cardiologist; his last residence was in Mobile, Ala. He is survived by his wife, Donna; his daughter, Ginger Blair Davis; his son, John Lynch Davis; and two grandsons. Dr. Davis was the son of John W. Davis, MD, who earned his CMED at UNC in 1944.

Jeffress G. Palmer, MD '44, died December 19, 2006. He received his M.D. degree at Emory University School of Medicine. Dr. Palmer joined the faculty at the University of North Carolina in 1952 as a Professor of Medicine. He also served as the first chief of the Division of Hematology.

Corbett Latimer Quinn, CMED '51, died on Dec. 16, 2006. His last residence was Magnolia, N.C. and his specialty was family practice.

James Allen Whitaker, CMED '31, died on Dec. 19, 2006. His last residence was Rocky Mount, N.C., and his specialty was urology. Dr. Whitaker was the father of another UNC School of Medicine alum, J. Allen Whitaker III, MD '68.

UNC Health Care increases access, improves financial assistance programs

UNC Health Care recently announced changes to its policies and procedures to help assure access to the health care system and improve financial assistance programs.

During the past six months, UNC Health Care has undertaken a focused effort to improve access to care, financial assistance outreach and collection of payment obligations from patients. These three areas have become increasingly important as demand for services and the cost of care continue to increase.

Last July, a leadership committee began assessing current policies and practices and making recommendations to improve access to the health care system. A report of the improvements was presented to the Board of Directors on Jan. 16 and approved.

A report detailing the changes made to increase access and improve financial assistance programs, Assuring Access at UNC Health Care, is available at www.unchealthcare.org.

UNC Health Care's patient-focused access initiative had three objectives:

1. Assess barriers to access.
2. Assess financial assistance and collections policies and practices.
3. Implement recommendations to improve access, financial assistance and collections policies.

To meet these objectives, UNC Health Care made changes to existing policies and created new initiatives, including hiring more financial counselors, improving and streamlining financial assistance processes and patient communications, and increasing awareness of the system's payment plans and other financial assistance policies.

Other changes were also made to grow community participation in the governance of UNC Health Care and make collections policies more patient-focused.

"The financial burden placed on patients by our impractical and often immoral system of health care financing has become a significant barrier to access," said William L. Roper, CEO of UNC Health Care. "The changes we have implemented are intended to ensure that no patient is denied access to needed care because of concerns about the costs involved. We are taking significant steps to remove cost as a concern for patients," added Dr. Roper.

As North Carolina's safety-net institution, UNC Hospitals provides approximately $500,000 per day in uncompensated care to patients admitted into the system.

UNC Health Care is committed to continually monitoring and recording progress in increasing access by using data to support ongoing self-assessment and improvement. The health care system will continue to report results to the community.

ROPER

Dr. Mauro appointed chair of Radiology department

Dr. Matthew A. Mauro has been appointed new chair of the department of radiology. The Ernest H. Wood distinguished professor of radiology and surgery, served as department vice-chair since 1991. A graduate of Cornell University (B.S., 1973), he received his M.D. from Cornell Medical School in 1977. His radiology residency at UNC, during which he served as chief resident from 1979-1980, was followed by a fellowship in diagnostic radiology and vascular/interventional radiology. In 1982, he joined the medical faculty as assistant professor of radiology and was appointed associate professor 1986, professor in 1991.

MAURO

Dr. Mauro's special interests include CT, angiography, interventional radiology, abdominal radiology, gastrointestinal tract imaging, angioplasty, biliary drainage procedures, embolization and stent grafts.

From 1999-2000, he served as president of the Society of Cardio-

news

vascular Interventional Radiology (now Society of Interventional Radiology) and currently is a member of the American Board of Radiology, Board of Trustees.

"Matt is an internationally respected expert in the field of vascular interventional radiology. We are confident that, under his leadership, the department of radiology will continue to serve the clinical needs of the patient population of UNC Hospitals with excellence, skill and dedication," said Dr. William L. Roper, medical school dean and CEO of UNC Health Care. "We also expect the department to achieve even greater prominence in research, education and service to the state of North Carolina."

Dr. Sartor appointed chair of radiation oncology

Dr. Carolyn I. Sartor is the new chair of the Department of Radiation Oncology. She succeeds Dr. Joel E. Tepper, professor of radiation oncology, who is stepping down as department chair after 20 years.

SARTOR

"Dr. Sartor is one of the rare individuals who can maintain the classical "triple threat" of academic medicine, as an accomplished basic science researcher, a well respected clinician who is active in clinical and translational research activities, and a superb teacher," Dr. Tepper said. "She has all the skills to lead the department of radiation oncology to a new level of excellence, and to enhance the research activities of the UNC Lineberger Comprehensive Cancer Center and the UNC School of Medicine."

Dr. Sartor's clinical interests include breast cancer radiotherapy, including radiosensitization using biologic modifiers and accelerated partial breast radiotherapy using a single dose of intraoperative radiotherapy. She has served as co-director of UNC's clinical breast program.

A professor of radiation oncology, the new chair leads a study of intraoperative radiation therapy for women undergoing lumpectomy. In this clinical trial, women with low risk breast cancers receive a single dose of radiation therapy during their surgery only, instead of the conventional six weeks of postoperative radiation. The goal of these studies is to improve effectiveness and minimize inconvenience and toxicity of radiation therapy for breast cancer.

Dr. Sartor's laboratory research includes studies of epidermal growth factor receptors, specifically the role these cellular proteins play in breast cancer development and response to radiotherapy. Her bench research has led to a clinical trial testing a new biologic agent as a radiosensitizer for locally recurrent breast cancer. Other clinically-based laboratory studies explore the molecular response of tumors to clinical radiation treatments.

She received her B.A. and M.D. from the University of Michigan in 1992, where she also completed residency training in radiation oncology. Dr. Sartor joined the UNC medical faculty in 1998.

Oliver Smithies to receive Genetics Society medal

The Genetics Society of America has announced that Dr. Oliver Smithies, Excellence professor of pathology and laboratory medicine at UNC, has been awarded the 2007 Thomas Hunt Morgan Medal given for lifetime contributions to the field of genetics. Founded 75 years ago, the society represents nearly 5,000 scientists and educators in the field of genetics.

SMITHIES

Dr. Smithies has won many honors for his pioneering work in gene targeting, a technique he co-discovered. He developed it as a way to create mice with specific genetic mutations that can mimic human genetic illnesses such as cystic fibrosis, some forms of anemia, high blood pressure and atherosclerosis. Since then the technique has helped researchers worldwide uncover a wealth of information about the role of genes in health and illness. Early in his career, in 1950, Dr. Smithies invented starch gel electrophoresis, a technique for separating proteins.

A member of the UNC Lineberger Comprehensive Cancer Center, Dr. Smithies won the 2001 Albert Lasker Award for Basic Medical Research, often called "America's Nobel," and the 2002 Massry Award. In 2003, he was elected to the Institute of Medicine, a part of the National Academy of Sciences and one of the highest honors given to U.S. health professionals. He was elected to the Academy in 1971. Dr. Smithies was elected to the American Academy of Arts and Sciences in 1978.

Smithies will receive the Morgan medal next January at the Genetics Society of America's newest annual meeting, "Genetic Analysis: Model Organisms to Human Biology," in San Diego, Calif. Dr. Smithies served as the society's president in 1975.

Kichak named one of Computerworld's Premier 100 IT Leaders for 2007

John P. Kichak, vice president and chief information officer for UNC Health Care, has been selected as as one of Computerworld's Premier 100 IT Leaders for 2007.

Computerworld's 2007 Premier 100 IT Leaders honors the 100 IT executives who have led their organizations by mentoring and motivating employees; envisioning innovative solutions to business challenges; and effectively managing and executing IT strategies. The 2007 honorees were recognized, with many presenting their success strategies, at

Computerworld's Premier 100 IT Leaders Conference in Palm Desert, Calif.

The complete class of Computerworld's Premier 100 IT Leaders for 2007 appears online at http://www.premier100.com and in the Dec. 11, 2006, issue of Computerworld (www.computerworld.com). In addition to the class roster, a special report highlights the challenges IT leaders expect to face in the coming year, including developing their staff's skills, mapping current IT initiatives with the top priorities of their CEOs and driving innovation.

Computerworld's Premier 100 IT Leaders Conference involves companies across all industries, as well as government and educational organizations. This year's recipients were selected from nearly 500 nominees, who were measured against Computerworld's IT Leadership Index, a set of characteristics that describes executives who guide the effective use of IT in their organizations, and evaluated by the editors and by a panel of outside judges. The candidates were asked about a range of topics, including their backgrounds, work experiences, special accomplishments and leadership styles.

The UNC Health Care System's IT division supports a very diverse customer base with over 13,000 users of its information systems. The IT division supports hardware, telecommunications, applications, security, training and customer support for over 350 business and clinical applications. These applications run across a variety of hardware from mainframe computers to mid-range servers and PCs. Telecommunications and networking support includes employee and patient access to both a wired and wireless network in order for each to access services on its intranet and the internet. It takes over 140 full time staff members to support this very complicated and diverse IT environment.

"Last summer, UNC Health Care was named as a finalist and laureate in the Computerworld Honors Program," said William L. Roper, MD, MPH, dean of the UNC School of Medicine and CEO of UNC Health Care. "That honor was based primarily on the work of J.P. Kichak and his staff in developing and implementing our Web Clinical Information System, which links 7,000 doctors and nurses at UNC Hospitals and across the state with the records generated by 1 million UNC patient visits each year.

"Now J.P. himself as been named as one of the 100 top leaders in the global information technology community. I am extremely proud of J.P. for his accomplishment, and we who live in North Carolina are very fortunate that he is dedicating his considerable talent and expertise to the betterment of our state-owned health care system."

Crafted by the publication's editors, Computerworld's Premier 100 IT Leaders Conference is a unique and compelling departure from the standard technology conference. Rather than focusing on vendors and products, the spotlight is on great ideas, strategic use of best practices and real-world leadership from the IT and business executives who are advancing their organizations through technology.

"This year's class of honorees is characterized by a diversity that demonstrates the value of unique

KICHAK

backgrounds and approaches in building an outstanding IT organization. Yet what these individuals have in common is an expertise born of hard work and an intangible leadership quality they can tap to successfully champion IT not only as a business enabler, but as a business influencer," said Don Tennant, editor-in-chief, Computerworld. "The professionals honored in Computerworld's 2007 Premier 100 IT Leaders program, and by extension the organizations they represent, are clearly mindful of their role and obligation as leaders of the global IT community. Their willingness to brave the scrutiny of the limelight as they share their experiences with their peers has won our respect, appreciation, and deep admiration."

Thurston Center marks silver anniversary

A reception was held Oct. 26 to celebrate the 25th anniversary of the Thurston Arthritis Research Center. Past and present board volunteers and donors, Thurston faculty members and members of the Thurston family gathered at the Carolina Inn.

William L. Roper, MD, MPH, dean of the School of Medicine, was keynote speaker. "UNC Health Care and the UNC School of Medicine are proud to have the Thurston Arthritis Research Center as a member of the health care family," he said. "The center is the result of a forward-looking vision to create a multi-disciplinary research center at UNC-Chapel Hill dedicated to finding cures and treatments for arthritis. Today, the Thurston Arthritis Research Center continues to be one of the stars in the UNC Health Care System."

Dr. Roper highlighted some of the many achievements of the center:

- Designated as a Multidisciplinary Clinical Research Center (MCRC) by the National Institute of Arthritis, Musculoskeletal and Skin Diseases (NIAMS), a division of the National Institutes of Health, one of only eight such centers in the country
- Designated as a Center of Excellence in Clinical Immunology by the Federation of Clinical Immunology Societies (FOCIS)
- The only arthritis research center in the country to receive continual NIH funding for 25 years
- Thurston faculty members are credited as major contributors to the Top 10 Arthritis Advances of 2005 by the Arthritis Foundation
- Thurston is ranked in the Top 25 nationally for clinical care in rheumatology in *U.S. News and World Report's* Best Hospitals 2005 survey.

A Phi Beta Kappa alumnus of UNC, Doc Jones

Thurston, Jr. was also a long time sufferer of the chronic pain of arthritis. Understanding the devastating effects arthritis can have on someone's life, particularly those of little means, it was his dream that this debilitating disease someday receive the same research and attention as cancer and heart disease. In 1994, thanks to a generous lead donation from Thurston, a free-standing multi-purpose research facility was built. The Thurston/Bowles Building is particularly distinguished on UNC campus as the first building to be funded entirely by private philanthropy. "The Thurston/Bowles Building stands as a shining example of what the private sector and the business community can accomplish when working together toward a common goal," Dr. Roper said.

Dr. Crowley gives Landes/Merrimon lecture

Faculty and students from the School of Medicine had a chance to hear William F. Crowley Jr., MD, speak at the Landes/Merrimon Lecture on Jan. 31. Dr. Crowley, the director of Clinical Reseach at Massachusetts General Hospital and director of the Harvard Reproductive Endocrine Sciences Center, discussed GnRH secretion and its connection to other conditions such as clef lip, delayed puberty, Kallman's Syndrome and Anosmia. His research focuses on the understanding and treatment of reproductive disorders that affect humans.

Dr. Crowley encouraged his audience to be aware of "unique biological opportunities" — or "UBOs" — in everyday practice. He noted that his area of research focuses on the patients that are exceptions to the rules and there are exceptional patients out there all the time. According to Dr. Crowley, knowing other people benefit from his findings is one of the greatest rewards of doing clinical research.

Following the lecture was the 39th Annual Student Research Day for medical school students. Students Mary Rogers and Morgan Lasater and Dr. Cherri Hobgood researched the interactions between Emergency Department physicians and their patients. They focused on how patients reported pain and the amount of non-medical information patients shared with physicians. Rogers, who studied patients of different genders and races, said she hopes her research will give doctors more tools to interpret patient pain.

The growing number of people diagnosed with diabetes led Medical student Sarah Guo into her area of research. Guo researched the similarities in behavior between patients with a high risk of diabetes and those who already have diabetes. She hopes doctors can use the research to assess their patient before the disease develops.

Sarah Brier and Jill Rau, co-presidents of The John B. Graham Student Research Society, said they were pleased with how the day went.

"We were especially excited with amazing speaker and the turnout and help from faculty judges," said Brier.

Rau said there are many research resources and opportunities because so many School of Medicine students do research while they are at the school and have access to excellent mentors and facilities. She also said that research helps supplement the broad range of information the students learn throughout their medical school experience.

Runge chosen for Sanders Distinguished Professorship

Marschall S. Runge, MD, professor and chair of the UNC Department of Medicine and president of UNC Physicians, has been named the Charles Addison and Elizabeth Ann Sanders Distinguished Professor in the UNC School of Medicine.

Dr. Runge was selected by William L. Roper, dean of the School of Medicine and vice chancellor for medical affairs for UNC Health Care. The professorship was created "to establish an endowed chair to attract or retain a distinguished teacher and scholar to the School of Medicine who is a recognized leader in the field of medicine or health care."

"To be named to the Sanders Distinguished Professorship is a tremendous honor for me and truly one of the highlights of my career," Dr. Runge said. A celebration was held last month to honor Ann and Charles Sanders, and Dr. Runge as the professorship's first recipient.

Before coming to UNC in 2000, Dr. Runge held the John Sealy Distinguished Centennial Chair in Internal Medicine and was director of the Division of Cardiology and the Sealy Center for Molecular Cardiology at the University of Texas Medical Branch at Galveston.

An honors graduate of Vanderbilt University with a bachelor's degree in biology and a doctorate in molecular biology, Dr. Runge graduated from the Johns Hopkins School of Medicine, where he was an intern and resident in internal medicine. He then completed a cardiology fellowship at Harvard's Massachusetts General Hospital and was a faculty member there prior to moving to Emory University as an associate professor of medicine in 1989.

"We're enormously pleased with this very important gift from Charlie and Ann Sanders, and excited for the opportunity to recognize Marschall Runge's medical leadership," Dr. Roper said.

The Charles Addison and Elizabeth Ann Sanders Distinguished Professorship in the School Of Medicine was established at the school through a $666,000 gift by Dr. Charles A. Sanders, a current member of the UNC Health Care Board of Directors and a former member of the UNC Board of Trustees. Dr. Sanders' gift has been matched by a grant of $334,000 from the state's Distinguished Professors Endowment Trust Fund to create a $1 million endowed professorship.

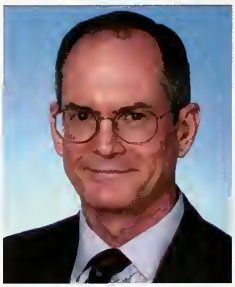
In addition to his many engagements with the university, Dr. Sanders, who completed a one-year term as North Carolina's first state lottery chairman last August, is a one-time U.S. Senate candidate and the retired chairman and chief executive officer of Glaxo Inc. He is also the former director of Massachusetts General Hospital and a former professor of medicine at Harvard Medical School. Dr. Sanders is currently chairman of the Foundation for the National Institutes of Health and a member of the Institute of Medicine of the National Academy of Sciences.

Last November, North Carolina Governor Mike Easley presented him with the 2006 North Carolina Award (science), the highest civilian honor the state can bestow.

Charles and Ann Sanders

Wright receives achievement award from American Academy of Ophthalmology

John D. Wright Jr., MD, associate professor of ophthalmology and pediatrics, has received the Achievement Award from the American Academy of Ophthalmology. The award recognizes Dr. Wright's contributions to the academy.



WRIGHT

To receive this award, an ophthalmologist must have made contributions to the profession through educating others, as well as serving in leadership roles. Contributions include serving as an instructor, authoring scientific papers and posters, presenting scientific exhibits, chairing a subspecialty day and serving as a committee member, state society presidents, trustees and authoring or co-authoring academy educational materials.

The award was presented in November

during the academy's 2006 joint meeting in Las Vegas. The American Academy of Ophthalmology is the world's largest association of eye physicians and surgeons.

Dr. Wright is a pediatric ophthalmologist and ophthalmic pathologist. He has a special interest in strabismus, amblyopia and eye tumors in children and adults. He has been a member of the UNC-Chapel Hill faculty since 2002.

Weber receives 2006 H. Fleming Fuller Award

David J. Weber, MD, MPH, is the 2006 recipient of the H. Fleming Fuller Award. Dr. Weber is a professor in the departments of Medicine and Pediatrics and a professor of epidemiology in the UNC School of Public Health.

WEBER

The award was presented to Dr. Weber Nov. 2 at the UNC Health Care board of directors' annual banquet.

"Dr. Weber is continually championing policies and procedures that result in safer care for all of our patients," said Gary Park, president of UNC Hospitals. "I can think of no one more deserving of the Fuller Award than Dr. Weber."

Given annually in memory of Dr. Fuller, a Kinston, North Carolina physician and founding member of the UNC Hospitals' board who died in 1986, the award recognizes doctors who demonstrate compassionate patient care and excellence in teaching and community service.

In a letter of nomination submitted on Weber's behalf, Marschall Runge, MD, PhD, chair of the Department of Medicine, described Dr. Weber as an invaluable resource who is often consulted by his colleagues on a variety of medical issues, particularly in the area of infectious diseases.

"Invariably Dr. Weber provides a state-of-the-art perspective that incorporates the medical information and takes into account the special needs of the patient," he wrote. "He has led many initiatives in infectious diseases and has served in critical leadership roles in infection control state-wide since the mid-1980s. Two recent issues addressed by Dr. Weber concerned how UNC Hospitals should respond to the SARS threat in 2003 and whether we should stockpile influenza vaccine in anticipation of an upcoming pandemic."

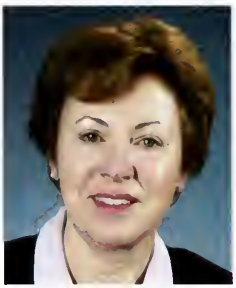
A native of New York City, Dr. Weber first came to UNC Hospitals in 1985 after completing a fellowship in infectious disease at Massachusetts General Hospital in Boston. Dr. Weber is board-certified in internal medicine, infectious disease, critical care medicine and preventive medicine.

Dr. Weber serves as the medical director of the departments of Hospital Epidemiology, Occupational Health, and Environmental Health and Safety at UNC Hospitals. He has served as an associate chief of staff for UNC Hospitals and assistant dean of UNC School of Medicine. He serves as the epidemiologist for the UNC General Clinical Research Center. In addition, Dr. Weber is an associate director of the North Carolina Statewide Infection Control Program, which is housed at the UNC School of Medicine.

Dr. Weber has published more than 80 scientific papers in the peer reviewed literature. In addition he has published 4 monographs and more than 40 book chapters, editorials, and short papers. Dr. Weber's major research interests include the epidemiology of tuberculosis, the epidemiology of HIV infection, infectious diarrhea, and nosocomial infections.

Dardess takes on new role in UNC School of Medicine

Dr. Margaret Dardess, UNC's associate provost for strategic partnerships, took on additional responsibilities Nov. 1 as senior counselor to Dr. William L. Roper, dean of the UNC School of Medicine, chief executive officer of UNC Health Care and vice chancellor for medical affairs.



DARDESS

Dr. Dardess will split her time between the provost's office and the dean's office in the School of Medicine. She will work closely with the School of Medicine and the other health sciences schools to build strategic partnerships with private industry and others.

"I have worked with Margaret Dardess over many years in her various important roles within the university — senior associate dean and interim dean of the School of Public Health, and now as associate provost for strategic partnerships," Dr. Roper said. "She is a bright, able leader, who is able to bring people together to achieve real collaborations."

Dr. Bernadette Gray-Little, UNC's executive vice chancellor and provost, said, "Margaret Dardess has done a wonderful job for us as associate provost for strategic partnerships. We are delighted that she will continue this work as she begins to focus her efforts in the School of Medicine."

Dr. Dardess came to UNC in January 2002 following 15 years at GlaxoSmithKline, where she was senior vice president of corporate affairs and a member of the board of directors of Glaxo Wellcome, Inc.

At UNC she became senior associate dean of the UNC School of Public Health and adjunct professor of health policy and administration, and from March 2004 until June 2005 served as the school's interim dean.

Dr. Dardess is chair of the North Carolina Board of Science and Technology and a member of the North Carolina Economic Development Board. She is president of the GlaxoSmithKline Foundation and a member of the boards of directors of the Center for Child and Family Health, the North Carolina Writers' Network and the Carolina Ballet. She also is a visiting professor of the practice at the Terry Sanford Institute of Public Policy at Duke University and a member of the Constella Group Advisory Board.

Weissler elected regent of the American College of Surgeons

Mark C. Weissler, MD, was elected a regent of the

WEISSLER

American College of Surgeons at the group's annual meeting in Chicago. Dr. Weissler is the J. P. Riddle Distinguished Professor of otolaryngology/head and neck surgery and chief of the division of head and neck oncology.

The college is the largest organization of surgeons in the world. It was founded in 1913 to improve the quality of care for the surgical patient by setting high standards for surgical education and practice. Dr. Weissler will serve an initial three-year term as regent.

Hobgood elected chair of board of directors of the American College of Emergency Physicians

Cherri D. Hobgood, MD, associate dean for curriculum and educational development and associate professor of emergency medicine, was recently elected chair of the board of directors of the American College of Emergency Physicians (ACEP). Dr. Hobgood, who has been a member of the board since 2004, will serve a one-year term as chair. She is the first woman ever elected to this position.

HOBGOOD

She was president of the North Carolina College of Emergency Physicians in 2002-2003 and was North Carolina's Emergency Physician of the Year in 2004. She led the efforts in North Carolina to ensure that health plans pay for services based on a patient's symptoms, not the final diagnosis.

Her educational intervention GRIEV_ING, designed to teach emergency physicians how to better deliver death notifications in the emergency department, is being nationally disseminated through a grant to the ACEP and Mothers Against Drunk Driving from the Office of Violent Crime.

Dr. Hobgood is a graduate of the UNC School of Medicine and a Diplomat of the American Board of Emergency Medicine.

Griffith receives gold medal from Slovakian university

Jack Griffith, PhD, Kenan distinguished professor of microbiology and immunology, has received the Great Gold Medal of Comenius University in Bratislava,Slovakia.

GRIFFITH

The medal, the highest award given by the university, was presented to Griffith in recognition of his scientific achievements and contributions to the field of biochemistry and molecular biology of DNA-protein interactions. The university also recognized Dr. Griffith for his long-term cooperation with faculty in its department of genetics and biochemistry.

Previous gold medal recipients include King Juan Carlos I of Spain and Nobel Prize winners Ahmed Zewil and Barry Sharpless.

Dr. Griffith, a member of the UNC medical faculty since 1977, published the first electron microscope image of DNA bound to a known protein. The American Society of Biochemistry has recognized Dr. Griffith as the world's most outstanding electron microscopist working with DNA.

National pediatrics committee names Bose as chair-elect

Carl Bose, MD, professor and chief of UNC's division of neonatal-perinatal medicine, has been named chair-elect of the executive committee of the section on perinatal pediatrics of the American Academy of Pediatrics. He will serve as chair-elect for one year, then will serve one year as chair, starting in 2008.

BOSE

The section on perinatal pediatrics represents neonatologists and other professionals who care for high-risk newborns. Its membership includes about 75 percent of the practicing neonatologists in the United States.

The section serves in a consulting capacity to the board of directors of the American Academy of Pediatrics to make recommendations for programs,

You are cordially invited to join us for the

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Inaugural Gala

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Highlights of this black tie evening include cocktails, a formal dinner, and a nationally recognized comedy headliner.

Tickets are $200 and sponsorship opportunities are available.

www.ncchildrenspromise.org 919.843.2915

policy statements and other actions on matters relating to the fetus and newborn infant.

Grimes elected to Institute of Medicine

David A. Grimes, MD, has been elected to the Institute of Medicine, considered one of the highest honors in the fields of medicine and health.

GRIMES

Dr. Grimes is a clinical professor of obstetrics and gynecology and a fellow at UNC's Cecil G. Sheps Center for Health Services Research. He is also vice president of bio-medical affairs at Family Health International in Research Triangle Park. Dr. Grimes' research interests include intrauterine devices (IUDs), emergency contraception, Cochrane reviews in family planning and research methods. He is one of a small number of physicians nationwide who is board-certified in both obstetrics and gynecology and preventive medicine.

Dr. Grimes is one of 65 new members announced by the Institute of Medicine this week. UNC-Chapel Hill has 19 active Institute members, including Dr. Grimes. New members are selected from candidates nominated for their professional achievement and commitment to service.

Recent Newsworthy Accomplishments in The Division of Genetics and Metabolism, Department of Pediatrics

Dr. Kathleen Rao, Professor of Pediatrics, Pathology and Genetics and Director of the Cytogenetics Laboratory and faculty member in the Division of Pediatric Genetics and Metabolism, was elected to the committee for the International System for Human Cytogenetic Nomenclature (ISCN) in August, 2006 for a term to run from 2007-2011. The committee consists of eleven elected members from six geographical locations throughout the world.

Dr. Cynthia M. Powell, Associate Professor of Pediatrics and Genetics and Division Chief of Pediatric Genetics and Metabolism, was elected to the American Board of Medical Genetics for a 6-year term beginning January, 2007. The ABMG is a member of the American Board of Medical Specialties and oversees certification of individuals and accreditation of training programs in the field of human genetics. Dr. Powell was also recently elected to the Executive Committee of the American Academy of Pediatrics Section on Genetics and Birth Defects for a 6-year term beginning November, 2006.

special EVENTS

Johnston lab dedicated
Johnston family siblings Patricia Johnson, Deborah Rodgers, Chuck Johnston and Susan Sellars with Charles Johnston, front.

Tickled Pink
Susan Moeser, Julia Huntley, Dr. Shelton Earp, director, UNC Lineberger Comprehensive Cancer Center, and UNC-Chapel Hill Chancellor James Moeser.

from the president

Dear Alumni and Friends:

What do we, as alumni, want to know about our medical school?

I think that most of us would simply like to know that our school is flourishing. And we would like to know how it can do more. Flourishing is most likely a measure of success that has various definitions for many of us. Fortunately, our medical school provides us with the opportunity to take pride in its many obvious and sometimes not-so-obvious accomplishments – achievements that are highlighted in this edition, and every edition of the UNC Medical Bulletin.

Specifically, this issue's cover story introduces the School of Medicine's new initiative to recognize and support excellence in the teaching of medical students. Many people outside medicine, and probably many practicing physicians, cannot appreciate the increased complexity of medical education and the challenges to be overcome in training new physicians. The mission of our school emphasizes education, research and practice. Even readers who only scan the headlines of the Bulletin quickly realize how our school advances research and patient care and how funding for these two areas continues to grow. Support for teaching has not always kept pace. However, the Academy of Educators will significantly enhance the educational mission of the School of Medicine and will build on the Medical Alumni Association's own efforts to recognize excellence in teaching through its Medical Alumni Distinguished Teaching Professorships. Currently, our association awards five of these professorships to deserving faculty and with the help of generous alumni, funding for several additional professorships has begun. It is especially exciting to see the School of Medicine make such a significant core commitment towards education.

We are indeed fortunate to have the opportunity to be part of these endeavors, and we should each commit and continue to be part of this success. The School of Medicine can always use your time, talents and gifts, but what do we as alumni want to do as an organized body? Recently, a survey was sent to the current members of the Medical Alumni Council seeking input on a variety of topics. The goal was to simply listen and try to improve our Alumni Association. Eventually, all alumni will receive this questionnaire, and I respectfully ask that you take a few moments and send your comments and suggestions back to us. We need to know how our Alumni Association can support us, as well as our school. I expect the survey to be distributed following our Spring Alumni Meeting in April.

It is always rewarding to see our school flourish, and it is always challenging to hear how we can improve. Our Alumni Association exists for the mutual benefit of its members, to improve the practice of medicine and to promote the general welfare of our medical school and that of the patients that the school and we serve.

I look forward to hearing how you think we as an organization can do better.

Regards,

Ted Kerner, MD '85

CME/Events Calendar

April 20-21
Spring Alumni Weekend

April 26-27
Lipid Clinic Training Program

June 2
Medicolegal Seminar 2007

June 9
Fisher Society Meeting

June 14-17
Carolina Refresher Courses

June 15-16
GU Cancers

July 12-15
Heart Failure Management

Sept. 21-22
N.C. Cardiovascular Update

Oct. 5-6
Fall Alumni Weekend

Nov. 2-3
Pelvic Pain

For more information, go to
www.med.unc.edu/alumni and
www.med.unc.edu/cme

Estate Planning Notice

Many individuals would like to make a major gift to the UNC medical center, but cannot commit current assets for such a purpose. Through a will, however, anyone can make a more significant gift than they might ever have thought possible by designating a specific sum, a percentage, or the residue of their estate for the benefit of the medical center.

To provide a bequest, simply include a paragraph in your will naming The Medical Foundation of North Carolina, Inc. as a beneficiary. For example:

"I give, devise and bequeath (the sum of $_____) or (_____ % of my estate) or (the residue of my estate) to The Medical Foundation of North Carolina, Inc., a 501(C)(3) created to maintain funds for the UNC medical center with principal offices located at 880 Martin Luther King, Jr. Blvd., Chapel Hill, North Carolina."

This language creates an unrestricted bequest for use by the medical center when and where the need is greatest, or you may specify that your gift be used for a particular purpose.

For further information on bequests, contact Jane McNeer at (919) 966-1201, (800) 962-2543, or Jane_McNeer@unc.edu.

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Global Health: UNC in Malawi

P10

Creating a CAROLINA LEGACY

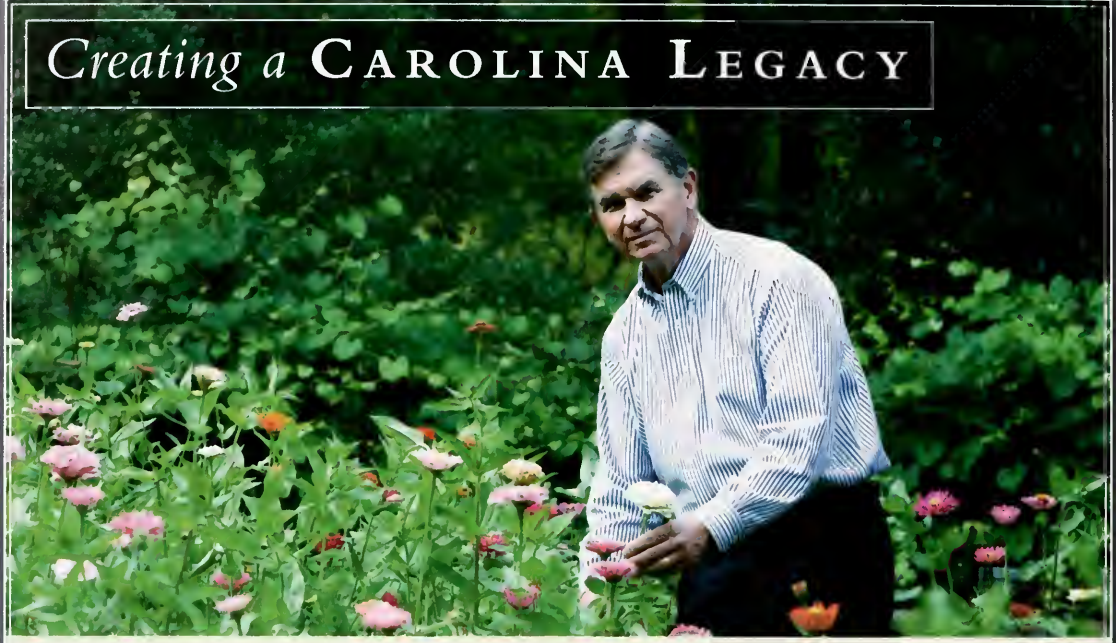

Photo by Fred Bennett

An Exponential Gift

MOREHEAD ALUMNUS AND RETIRED HEART SURGEON HONORS UNIVERSITY FOUNDATIONS THAT SHAPED HIM

JOE CRAVER '63, '67 (MD) just retired from a 31-year career as a full-time cardiac surgeon and professor of surgery at Emory University School of Medicine. Reflecting on his life, Craver felt that there were some pivotal moments for which he was very grateful. The first big one, he said, after being born to and reared by his parents, was attending Carolina as a Morehead Scholar.

"THIS AWARD PRESENTED significant opportunities as well as challenges to me—to justify their selection," he said. "I endeavored to meet those, and I'm now even more grateful for their support and for UNC."

LEADERSHIP BECAME SYNONYMOUS with Craver on the Carolina campus. He co-captained the football team and received numerous awards as an undergraduate as well as a student at the UNC School of Medicine.

CRAVER FELT THAT he would like to make a tangible gift to UNC to express his gratitude. He and his wife, Amelia, decided that they were not as dependent on his 401(k) retirement funds as expected. Also, because these funds are taxed at the maximum rate if used personally or passed as inheritance, they seemed ideal for a charitable gift. Craver sought a creative way to use these funds while he was still alive. He learned he could buy a commercial annuity within his IRA rollover account and name the UNC Medical Foundation and the Morehead Scholarship Foundation as charitable beneficiaries. Upon his death, they would receive the full corpus (currently valued at $1.25 million, plus their growth) as endowment funds. The UNC Medical Foundation will use $250,000 of these funds to establish the Joseph M. Craver Teaching Professorship. He also will make annual gifts from the annuity income he receives to provide each foundation with current resources during his lifetime.

"THIS WAY, THE benefits start now for both of us," Craver said.

CRAVER ALSO PURCHASED life insurance policies for each to protect the values of the ultimate principal distributions to both foundations.

THE SON OF TEACHERS, Craver enjoyed teaching every single day of his professional career, and thinks of teaching as a way to "extend one's life's work exponentially." He is now taking that legacy of teaching in another direction by showing others how to discover creative ways to use their resources.

If you're interested in creating your Carolina legacy, please contact Candace Clark, associate director of planned giving, at 919-962-3967 or 800-994-8803 or createalegacy@unc.edu.

THE Gerrard LEGACY SOCIETY

carolinafirst.unc.edu/giftplanning

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ON THE COVER

A young Malawian patient lies on a makeshift cot while an elderly relative sits with him. UNC's work in Malawi is helping to improve health care in the impoverished country, as well as in North Carolina and the world. See story on page 10.

Photo by Mariah Hoffman

Building a Bridge to Mental Health

North Carolina doctors and psychiatrists work together to get patients the care they need

BY ANGELA SPIVEY

On a map, the 35 miles between Burlington and Chapel Hill doesn't seem far. But for people who must ask a friend to take time out of work to drive them 40 minutes each way for a doctor's appointment, Chapel Hill can seem a world away. If that appointment is with a psychiatrist, they might not want to tell their friend for fear of being labeled a "mental patient." To add to their worries, they may not even be sure the appointment will be covered by their insurance.

For women who visit the Alamance County Health Department for their prenatal care, those are just some of the barriers to getting the mental health care they need. "When women end up coming to the health department for their prenatal care, a greater percentage of them have experienced sexual or physical abuse or domestic violence, so they often come into our office with a loaded set of issues," says Kathleen Shapley-Quinn, MD, medical director of the Alamance County Health Department.

But in the wake of state mental health reform, getting services for such patients is a challenge. "Women who want help can go to the mental health clinic and get filtered into community providers, and sometimes that works well and efficiently, and sometimes it doesn't," Shapley-Quinn says.

Early this year, Shapley-Quinn approached Samantha Meltzer-Brody, MD, assistant professor of psychiatry at the UNC School of Medicine and co-director of the Perinatal Psychiatry Program at the UNC Center for Women's Mood Disorders, about collaborating to help women such as these get mental health care. Now Meltzer-Brody and her colleagues conduct a weekly videoconference for the Alamance family medicine doctors and nurse practitioners who see women in the prenatal clinic. The UNC psychiatrists provide training in diagnosing and treating common mental health issues during pregnancy such as depression and anxiety, and they consult on specific cases when needed.

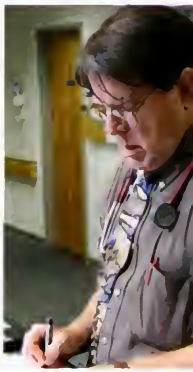
Now women in the prenatal clinic get on-site counseling or medication for problems such as anxiety, post-traumatic stress disorder, and depression, whether the problems developed during pregnancy or long before. "We are trying to strengthen our relationship with community mental health providers because that will only serve us well in the long term," Shapley-Quinn says. "But at this point it has been really energy intensive to get that to work, so we're fortunate to have this other system in place at this time."

More and more, physicians are seeking creative solutions to get North Carolinians the psychiatric care they need. A number of circumstances have combined to make these efforts necessary, including a state mental health system that remains in flux, as well as insurance and Medicaid rules that, some say, make it too difficult for primary care physicians to treat patients with mental health issues.

"One of the really pressing mental health issues is the disassembly of the current community mental health system to be replaced by local medical entities," says Bradley Gaynes, MD, associate professor of psychiatry at UNC-Chapel Hill. Community health centers, now called local medical entities (LMEs), no longer employ psychiatrists or counselors. The LMEs simply act as managers of resources and offer referrals to private mental health providers.

In addition, public services are increasingly targeted to those with the most serious mental health problems. "Over the last decade or so in

Clockwise from top-right Samantha Meltzer-Brody, Robert Gwyther, and Bradley Gaynes



North Carolina there has been a movement to focus community mental health care on the severely mentally ill—people with bipolar disorders or psychotic disorders like schizophrenia—and to move other important mental health issues into management by primary care," Gaynes says.

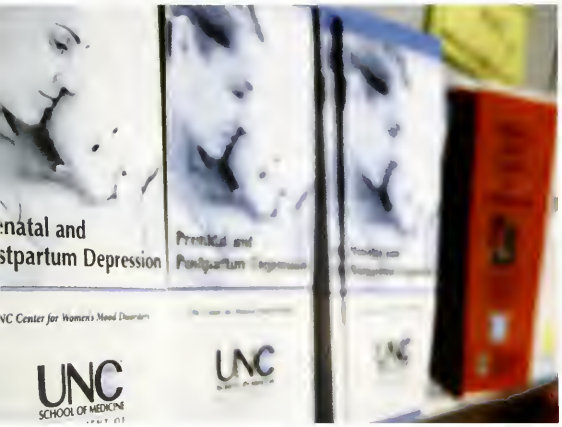
That movement is not unique to North Carolina, says Joe Morrissey, PhD, a professor in UNC's Department of Social Medicine and School of Public Health, who has studied the provision of mental health services at the state and national levels. "Many states around the country have been doing this for many years, prioritizing state dollars for people with mental illnesses who are most in need," he says. "As the prioritization went forward,

indeed there were people who had been treated before who were found to be ineligible for publicly financed services. Those are the people who are probably showing up more in primary care offices."

Studies show that primary care doctors can provide reasonably good care for common mental health disorders such as depression, anxiety, and substance abuse, Gaynes says. And many physical health problems that send patients to their family doctor may be caused at least in part by an underlying mental health issue, says Sally Smith, RN, LCSW, project director for ICARE (an acronym created from the terms "integrated," "collaborative," "accessible," "respectful," and "evidence-based"), a partnership of several organizations, including the North Carolina Area Health Education Centers Program (AHEC), that is testing models for integrating psychiatric care into primary care settings.

Is Integrated Care the Answer?

"The statistics show that about 70 percent of the time, when patients come in with things like backache and headache and stomach pain, there's not a biological reason for that. We think that has to do with transitional depression, or substance abuse that doesn't get named," Smith says. "The idea of integrated care is to provide the patients with a better and more thorough experience, and hopefully to save money for the insurance companies and the community. The patients won't need to come to the doctor as often if they are actually being treated for the underlying problem that is causing their symptoms."



An integrated model of care may be ideal in the long run, not just a short-term solution in the wake of mental health reform. "Many people see an integrated, seamless care system as the ideal here, rather than a separate mental health system and a physical health system," Morrissey says. For instance, such a system may encourage more people to seek care. "There are an enormous number of people who still feel very stigmatized about seeking mental health care," Meltzer-Brody says. "But if they can be treated within their primary care provider's office, they are much more comfortable being seen in that setting."

For this to work, physicians will need continuing training in identifying and managing such illnesses, and how to recognize when referral to a mental health specialist is necessary. "We need to create a structure to help support primary care doctors in providing these services," Morrissey says. "The ideal here is to create a seamless system. But we have a long way to go."

Robert Gwyther, MD, MBA, professor of family medicine, works with ICARE to develop strategies for primary care doctors to treat common ailments such as anxiety, panic attacks, and depression. "We're trying to put together algorithms and continuing medical education programs that bring family doctors current on how to treat those conditions," Gwyther says. ICARE also provides training to doctors in how to identify and manage emergencies and refer patients to a psychiatrist or hospital, such as when patients are suicidal and homicidal.

ICARE is also testing a model in which a therapist works side-by-side with the doctor in a primary care practice. The therapist, who could be a licensed clinical social worker or a licensed professional counselor, can diagnose mental health problems, offer short-term treatment, and help the physician determine when a patient needs to see a psychiatrist. A referral may be needed if, for example, a patient has been seen by the in-office

therapist a few times and has been on medication but is not improving.

Morrissey leads a group of researchers (including Gaynes) that has begun to evaluate the integration efforts at ICARE's sites, in Asheville, Henderson, Lumberton and Wilmington. The group will study issues such as whether the rates of diagnosis of mental illness are greater in ICARE practices compared to control practices, and whether the prescription of psychiatric medications is more in line with best practices at the ICARE sites.

Psychiatrists On Call

Another crucial aspect of integrating care is helping primary care providers develop relationships with psychiatrists so that a primary care doctor could, for example, get a patient in to see a psychiatrist on short notice. "We have found in our trials that psychiatrists are underused and are seen as not being available when needed. Many doctors don't have a consulting relationship with a psychiatrist the way they may with an orthopedist or a cardiologist," Smith says.

Smith has seen many examples of the dangers of lack of communication between primary care doctors and mental health specialists. She mentions a patient who was taking atypical antipsychotics for schizophrenia prescribed by a psychiatrist; but the patient's primary care doctor, concerned about the patient's obesity and the medication's side effects of elevated blood pressure and blood sugar, took the patient off the medication without consulting with the psychiatrist. "It is critical that primary care doctors communicate with specialty mental health professionals, whether it is a private psychiatrist or someone in community mental health," Smith says.

Even within UNC Health Care, new relationships between psychiatrists and other health care providers are helping improve access to psychiatric care. For example, it was only in 2005 that the Department of Obstetrics and Gynecology (OB-GYN) began universal screening for depression on all postpartum visits, using a self-administered questionnaire called the Edinburgh Postnatal Depression Scale.

Meltzer-Brody's opening of a perinatal depression clinic in 2004, and its expansion into the UNC Center for Women's Mood Disorders in 2006, was one incentive for this formal screening to begin. "No one wants to screen for something if they have no idea how to treat the patient," Meltzer-Brody says, but now the perinatal

ARTICLE CONTINUED ON PAGE 35

Is North Carolina Short on Psychiatrists?

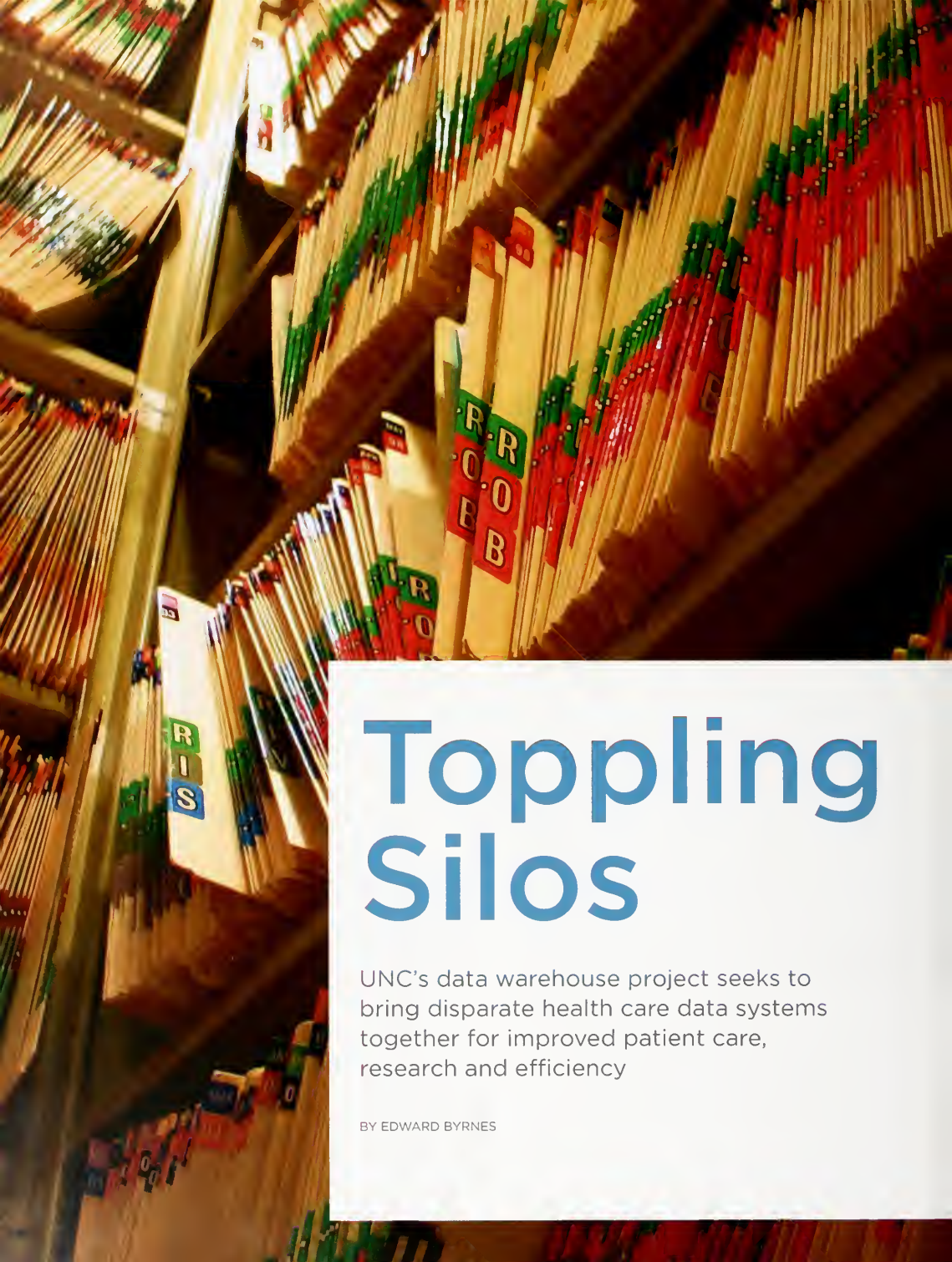
After mental health reform gathered steam in North Carolina in 2000, some speculated that the reform would drive psychiatrists from the public mental health system, and therefore the state. But a 2004 report from several organizations, including UNC's Cecil G. Sheps Center for Health Services Research, found no evidence of that, says Joe Morrissey, PhD, deputy director for research at the Sheps Center.

"Instead, the report found that there's been a longer term decline in the supply of psychiatrists," Morrissey says. "The absolute number of psychiatrists may not have changed—it may have even grown. But if the population goes up, the ratio of the population to psychiatrists will not be favorable." Population growth has been consistent in the state, but the training and retention of psychiatrists has not kept up.

"Examination of the total number of psychiatrists in the state obscures their serious misdistribution, a problem that has clearly worsened over the past five years," says David Rubinow, chair of psychiatry and director of the UNC Center for Women's Mood Disorders. Between 1999 and 2004, five counties lost all of their psychiatrists, 12 counties continued to have no psychiatrist, and 48 counties experienced a decline in psychiatrists relative to population growth. Forty-four counties have fewer than one psychiatrist for every 30,000 persons.

The situation is worse for child psychiatrists, the supply of which has declined 24 percent relative to the population over the past decade. Currently, 43 counties have no child psychiatrist and 42 counties have fewer than one child psychiatrist per 10,000 children.

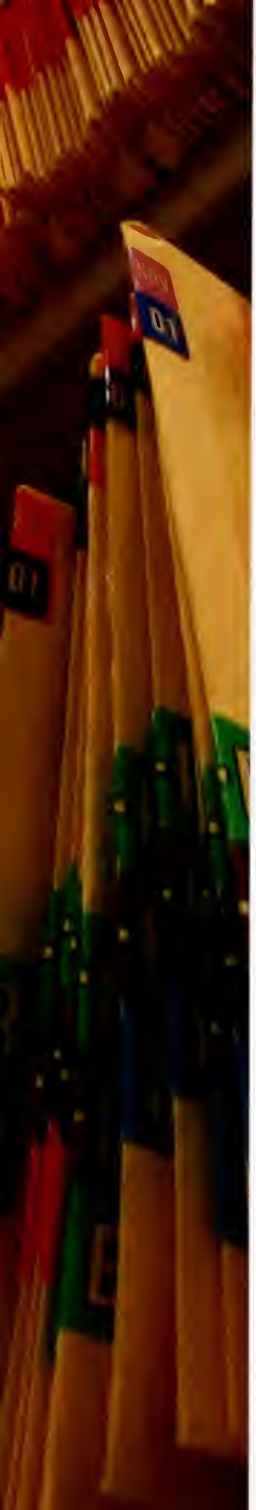
"Training and retention of psychiatrists for the public sector should be a state priority, both for delivery of care and for consultation to primary care physicians, who are also in short supply," Rubinow says.



Toppling Silos

UNC's data warehouse project seeks to bring disparate health care data systems together for improved patient care, research and efficiency

BY EDWARD BYRNES



"Knowledge is power." These words of Sir Francis Bacon, penned more than 400 years ago, have more meaning today than he possibly could have imagined. Were he alive today, Bacon would marvel at our potential to collect and organize information and use it to create and refine knowledge. Yet for multiple reasons, health care organizations have been slower than those in other disciplines to tap their vast information stores to improve efficiency, quality and safety, and customer service. Now UNC Health Care is among a handful setting out to do just that.

A steering committee consisting of School of Medicine Dean, Vice Chancellor of Medical Affairs and UNC Health Care Chief Executive Officer Bill Roper, MC, MPH, School of Medicine Executive Associate Dean for Clinical Affairs Brian Goldstein, MD, MBA, FACP, UNC Hospitals President Gary Park, School of Medicine Vice Dean for Clinical Affairs Marschall Runge, MD, PhD, School of Medicine Vice Dean for Academic Affairs Etta Pisano, MD, and UNC Health Care Interim Chief Financial Officer Al Stewart, have convened to begin the enormous organizational and technological challenge of creating a data warehouse—a vast searchable repository of the organization's administrative and clinical memory.

The birth of data warehousing can be traced back to the late 1980s, when organizations began to recognize the need for a technology to integrate, manage, and query the numerous and vast volumes of business data that emerging technologies were allowing them to accumulate. Much of the systems that existed were transaction-based and isolated, and could not query all of the information being gathered in a timely manner. The data warehouse concept moved data collection and storage from these siloed, transaction-based models to a comprehensive, analytic and reporting model.

For health care organizations to achieve this level of data integration, they must overcome many barriers, none unique to health care but in some cases tougher to solve. First, there must be common data definitions. For example, a simple test result like a white blood cell count, or even a demographic field like a telephone number, must be expressed in exactly the same way in every database. The data must also be coded so that it can be retrieved and sorted in response to any of a number of diverse queries, from direct patient care, to clinical research, or to monitor patient safety. And of course every data transaction must preserve patient privacy and confidentiality.

UNC Health Care and UNC Hospitals currently have more than 200 operational and clinical information systems that record and store data every day, on everything from patient flow, laboratory results and medication administration to administrative and key financial cost indicators. This wealth of information is the foundation on which clinical research and the organization's decision support systems, among others, are based. Unfortunately, most of these information systems are not compatible with one another from a data sharing

standpoint, making use of the information incredibly limited and certainly not to even a fraction of its potential.

"We need to take all of that data and put it into a single place, under a common set of definitions, so we can have tools to access it, query it, and use it ... to operate on like any business would," says J.P. Kichak, UNC Health Care's chief information officer.

An enterprise whose first priority is to provide outstanding medical care to the people of North Carolina, it is no surprise that clinical data will be the backbone of the data warehouse. UNC Health Care currently has more than 17 years' worth of patient and clinical data in its clinical data repository (CDR), fed by its electronic medical records system, named the Web Clinical Information System (WebCIS). WebCIS, in turn, is fed by approximately 40 different clinical data systems, such as the lab results reporting system, pharmacy management system, and Computerized Physician Order Entry (CPOE) system, that health care personnel use every day as they provide patient care.

"The data warehouse can bring in information from WebCIS, our electronic medical record, it can bring in information from patient accounting, and it can tie this information to the most up-to-date results from clinical trials, allowing us to optimize our care for patients," says Dr. Runge. "The data warehouse can also help the hospital and health care system plan for what kind of resources we need to have. For instance, it can help us predict the needs for our hospital over the next five to ten years. We'll be able to see whether we are going to need more CAT scanners or more operating rooms, or more inpatient or outpatient facilities—all so that we can provide the care needed by people from all over the state."

From a research perspective, a data warehouse can provide researchers with a wealth of searchable data regarding patient populations, medications, diseases, therapies, plans of care, radiology, lab results, and many other sources of anonymous patient and medical treatment information.

"It will allow us to look at the ways we care for patients in any discipline, to assure that we are taking advantage of state-of-the-art developments and in areas where clinical care can be improved, build a framework for allowing us undertake an array of clinical trials in ways that were not previously possible," says Runge.

Cam Patterson, MD, chief of the Division of Cardiology and director of the Cardiovascular Biology Center at UNC, and a member of the data warehouse project steering committee, agrees. "With this project, we're asking how can we provide the best medical care to the people of North Carolina and ... how can we take advantage of the resources we have here at UNC to do research that will truly advance the field and be innovative, and will provide us with new insights into the diseases we're trying to cure."

Runge adds that the basic science program at the School of Medicine is gathering all kinds of information relevant to patient care regarding gene expression in cancer, cardiovascular disease, and diabetes; and how researchers at the school and across the Chapel Hill campus are looking at how genes may be important in determining an individual's potential to develop a particular disease.

"The goal is to achieve the holy grail of personalized medicine, where a patient would receive individualized testing, pharmacotherapy and lifestyle changes based on their own genetic background. But I think we're a long way from this, perhaps 20 to 30 years," he says.

A data warehouse is a necessary step toward this end. Runge admits that the hardest part will be determining, out of the infinite number of research questions one could ask, which ones should be asked first. And many people ask Kichak why UNC researchers and physicians can't use the data they already have for research.

"Searching our current databases, running a query from the top of the database to the bottom may take an hour to run. Meanwhile, we're trying to get a two-second response time for 1,000 physicians who are also accessing the database while tending to patients. It won't work that way. The clinician will be slowed down. The CDR doesn't equal a data warehouse. It complements and interacts with

...it is no surprise that clinical data will be the backbone of the data warehouse.

the data warehouse, but it is not one itself," says Kichak.

Currently, there are also several fragmented financial and administrative data repositories for general accounting, human resources and payroll, contract management, and financial management constituting a vast number of islands of decision support information.

"It's very siloed, however we are positioned very well because we do have all of this data," says Kichak. "And we need a data warehouse because we're getting tremendous pressures from consumers who want to know the quality of outcomes, and the Institute of Medicine, which wants to insure that we are providing the best care. And we have to provide data to CMS (Centers for Medicare and Medicaid Services), as well as the Joint Commission and Leapfrog Group. They're not just going to take our word for it, we've got to provide more and better information."

The steering committee has identified the islands of information that need to be brought in, and has finalized the plan of action to bring the data warehouse to life at UNC. The committee is currently working with a consultant to explore partnerships with key data warehouse companies—because there is not one single vendor who can provide all of the parts of the puzzle, and costs and risks are significant.

"You can't go it alone. Not many of the first four or five organizations to do this sort of thing have gone into it blind—they've partnered up with somebody. What we want to do is get a commitment out of a vendor that they'll spend time here and help us in exchange for getting our intellectual capital," says Kichak.

ARTICLE CONTINUED ON PAGE 34

Photo by Elizabeth Storey

Making Global Health Connections:
North Carolina to Malawi

UNC's School of Medicine is deeply involved in research, service and teaching in many countries across the globe, including several sites throughout southern Africa. UNC School of Medicine Dean William Roper visited South Africa and Malawi during late May and early June of this year to meet with the researchers, teachers, students and UNC's African partners. The following text is taken from his blog, www.roperonhealth.com, wherein he chronicled his travels.

Day One: May 23

From London's Heathrow Airport

UNC has worked in Africa for the past 20 years, most intensively in South Africa and Malawi. For the next two weeks, I will be traveling in South Africa and Malawi to visit the students, faculty and staff working with UNC's infectious disease programs in those countries. I will also meet our partners at the University of the Witwatersrand in Johannesburg, South Africa.

UNC has had a major impact in South Africa and Malawi. Conversely, work in these countries has greatly enriched UNC. I am hoping that my visit will lead to even further opportunities and collaboration.

I have long wanted to take this trip, as I have heard many, many times about the exciting and important work our faculty are doing in global health—and in infectious diseases, HIV/AIDS in particular. The challenges faced by the people of Africa are huge, but there is progress in many areas. I want to learn a lot, get to know our colleagues and partners and discuss how we can be even more involved in global health from Chapel Hill. I already feel a long way from South Columbia Street and Manning Drive—more traveling to come!

Day Two: May 24

Global health work in South Africa directly benefits the people of North Carolina

In South Africa we have UNC grad students and faculty working with key researchers. And we are working on a three-way partnership between the University of the Witwatersrand and the Malawi College of Medicine (COM) for training of Malawi health professionals in southern Africa, who will return to work in Malawi.

Our work in Malawi is supported by $8 million per year in research grants, which comes to UNC. This supports the salaries of UNC faculty who provide care to North Carolinians and teach UNC students. It also provides training opportunities for UNC medical students, residents and graduate students—more than 20 this year alone.

UNC's facilities in Malawi also give us cutting-edge labs in a distant country, which allow us to keep track of emerging infections that eventually might be problematic for North Carolina citizens. And the development of diagnostic assays and prevention and treatment plans in Africa will also advance care in North Carolina.

Working with senior governmental officials in South Africa and Malawi, as I and others will be doing this week, helps establish friendly links with other countries that are trading partners of the United States. So UNC's global health initiatives are important for our contributions that help others—but also because this work directly benefits the people of North Carolina. We seek to grow and expand these vital activities around the world, and at home.

Day Three: May 25

Greetings from Johannesburg, South Africa!

I arrived here this morning and was met by Charlie van der Horst, who is one of UNC's leaders in infectious diseases and especially HIV/AIDS. He has been working extensively with colleagues in South Africa and Malawi for the past five years.

We had a lunch meeting at the University of the Witswatersrand, hosted by Professor Helen Laburn, the dean of the faculty of health sciences. Also there was Ian Sanne, who is van der Horst's

principal collaborator in South Africa, and a number of other colleagues who hold medical school and public health faculty positions at UNC, including epidemiologists Annelies Van Rie and Audrey Pettifor from the School of Public Health. I was really impressed with what is being done between our two universities.

We discussed even broader and deeper collaborations, including the possibility of linking UNC, Wits and the College of Medicine in Malawi, for training of Malawian physicians here in South Africa. I believe this partnership has rich potential, and the benefits will be great for all parties, including the people of North Carolina, as we grow our global health work it will help what we are doing back home.

Day Four: May 26

A Model for Care in South Africa

Last evening we had a most pleasant dinner with UNC's colleagues in South Africa. Charlie van der Horst has built a large number of very substantial collaborations here over the past five years.

I visited at length with Professor Laburn, and with Dr. Melinda Wilson, the head of the President's Emergency Program for AIDS Relief (PEPFAR) here in South Africa. She is a senior U.S. government official, a part of the U.S. Agency for International Development.

PEPFAR has a rapidly growing series of programs that they fund here, the largest of which is Right to Care, the non-profit organization headed by Dr. Sanne. Yesterday afternoon I toured the Right to Care offices and clinics, and I was very impressed with what they are doing. They now have more than 8,000 people receiving anti-retroviral therapy, with very careful evaluation, monitoring, follow-up and care—all with very sophisticated web-based data collection and analysis. This really is a model for what can be done, not just in South Africa, but around the world.

Clearly global health means UNC is helping to do important things at a distance, but as we help to innovate we learn—and that is of great benefit to us all, including North Carolinians.

Day Five: May 27

My Introduction to Malawi

It is late afternoon on Sunday, May 27. Yesterday we flew from Jo'burg to Blantyre, Malawi. We were met at the airport by Irving Hoffman from UNC. Irving has worked in Malawi for 15 years, and is spending the summer here this year.

Malawi is a much different country than South Africa. In contrast to South Africa's vibrant economy, skyscrapers and expressways, Malawi is one of the world's 10 poorest countries. The roads are filled with people walking or biking, and they are often carrying huge loads, either on their heads or on the backs of the bicycles. They have sticks, sugar cane, anything that they need to move. The average annual income in Malawi is around $170, and unemployment is a huge problem. The streets and roadsides are filled with

Photo by Mariah Hoffman

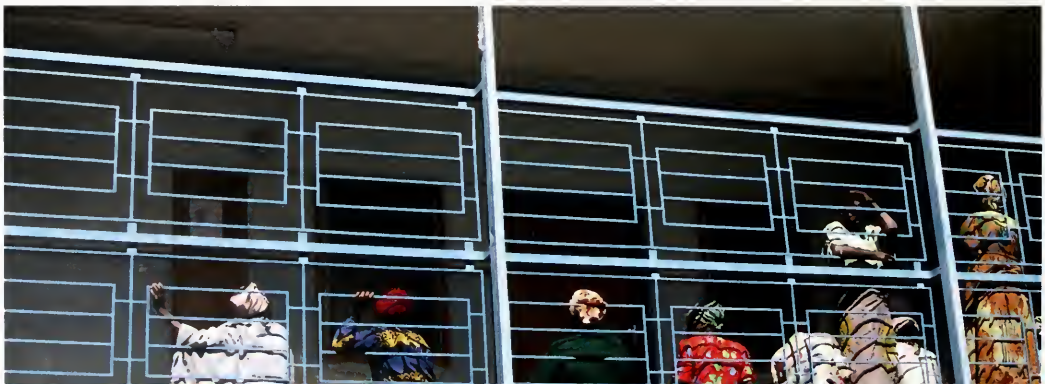


Photo by Elizabeth Storey

people trying to sell something, anything to make a bit of money.

But with all the economic challenges, the Malawian people smile! Everywhere we are greeted with broad and genuine grins, and it is very welcoming. I am told that Malawi is called "The Warm Heart of Africa," and it's easy to see why.

Last night Irving told us about his work here, focused on sexually transmitted diseases, HIV/AIDS, tuberculosis and malaria. About 15 years ago, he and Mike Cohen published a paper that made a major contribution to the world's understanding of how HIV is transmitted. They showed that men with active STDs are much more likely to transmit the virus that causes HIV/AIDS than men without STDs.

UNC has built a major set of research, service and teaching programs in Malawi, and now spends about $12 million per year here. Much of that is in Lilongwe, where we will go on Tuesday.

I asked Irving whether he is hopeful about the future of Malawi and he paused and told me how committed he is to this work, and how important it is to be here in this very poor country. He then told me of the successes that the programs have had, including a reduction in the HIV prevalence rate over the past several years. Clearly though, this work takes major persistence and real heart.

After brunch, we were introduced to Mick Royle, a friend of Irving's, who is a native Malawian. He is a well-trained naturalist, and his business is guiding tours of this region. Irving described him as the real "Crocodile Dundee," and that is very apt. We rode in his Land Rover an hour east of Blantyre, to the tea estates—vast fields of tea bushes. They are pruned to be about three feet high and at a distance it looks like acres of finely pruned boxwood shrubs.

We went to Mt. Mulanje, and had a picnic beside a beautiful mountain stream. We ate sandwiches and fruit that we bought along the roadside on the way: pineapple, bananas and sugar cane. We took lots of pictures of the vendors, and they loved getting Polaroids of themselves!

My vision of global health is getting sharpened and made very real—especially through the insights I am getting from the very committed people who work here—Malawians and Americans. And I can see even more why global health is important, not

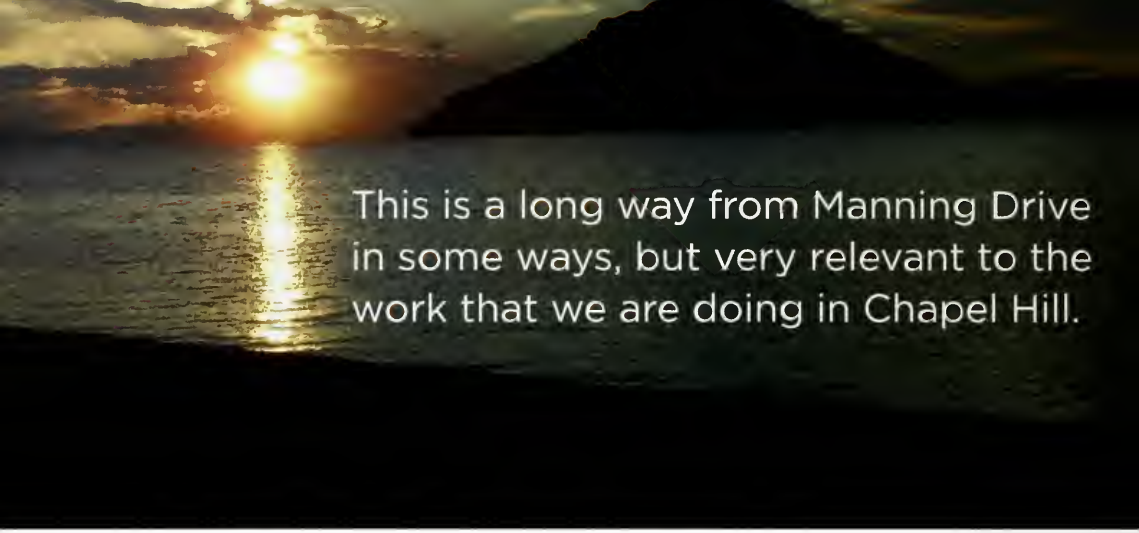


Photo by Alex Stockdale

just for UNC researchers, but for the people of North Carolina.

Day Six: May 28

UNC at Work in Malawi

I spent today at the Malawi College of Medicine, seeing lots of interesting and impressive things. My host was Dr. George Kafulafula, the vice-principal of the COM. George is an OB-GYN and former head of that department here. His principal research interest is the prevention of maternal to child transmission of HIV. He is a young doctor in a very responsible position, with obvious commitment and dedication.

The College of Medicine is located on the grounds of Queen Elizabeth Central Hospital (QECH), a sprawling institution of 1,500 beds. It is made up of many buildings, all one floor, connected by covered walkways. I had visited QECH in 1991, when I was Centers for Disease Control and Prevention director, as part of a U.S. government delegation. They have made progress in many areas, but it is still a stark contrast to a hospital in America. The doctors, nurses and others are struggling to care for a huge burden of illness, with inadequate facilities and limited supplies and equipment. One image that will stick with me: in the children's ward an IV pole was not tall enough to hang an IV for a high bed, and so it was extended with a whittled branch that was taped to the pole. It did the job, but was still jarring.

We met with Dr. George Chithope Mwale, the director of QECH. He is himself a graduate of the COM, and formerly was a district health officer. He talked about the challenges he faces to try to care for the teeming numbers of patients who come to his hospital. The wards were jammed full, with more beds than they were built for. In one of the men's medical wards, for example, I counted 60 beds—all full, with many family members as caregivers—in one large open room.

We went to the pediatrics wards, and for me, a pediatrician, it was particularly poignant. In the children's malaria research unit, we saw where they care for the most severely ill patients, including those with cerebral malaria and meningitis. A young registrar (resident) gave me a tour, along with a clinical officer (like a physician assistant). I was really taken with their enthusiasm despite the huge challenges.

I am pleased that UNC has done and is doing so much here—the opportunities are great.

Photo by Mariah Hoffman

Day Seven: May 29

Greetings from the UNC Project in Lilongwe, Malawi!

This morning we drove the 180 miles from Blantyre to Lilongwe, which is the capital of the country.

Here on the grounds of Kamuzu Central Hospital, the UNC Project has its headquarters in the Tidziwe Center, a building built in 2003, to house the various UNC-led research, clinical care and training programs. UNC has more than 300 staff here, and a very impressive set of projects. I got a briefing just now from Dr. Francis Martison and his team.

This is a long way from Manning Drive in some ways, but very relevant to the work that we are doing in Chapel Hill. Things learned here have direct application back home. It is global health in action.

Day Eight: May 30

Visiting UNC's Project in Malawi, Part 1

Greetings from the UNC Project at the Tidziwe Center in Lilongwe, Malawi. This morning I and others from the UNC Project had a meeting with the minister of health for Malawi, the Hon. Marjorie Ngaunje. She is a member of Parliament, and has relatively recently come to this cabinet position. We talked about the UNC work here, and the partnership we have in research, care and training.

These governmental relationships are very important, as they can either greatly aid the work here, or make it very difficult. She pledged her efforts to work smoothly together.

This entire trip is a great experience for me. I am learning a lot, and will want to continue this work when I return to Chapel Hill. As I have said, global health is just as relevant there, to the people of North Carolina, as it is in Malawi. For example, one of the key studies we are doing here is developing new ways to diagnose acute HIV infection, even before the commonly used lab test turns positive. This will have major implications for the diagnosis of HIV in the US.

Visiting UNC's Project in Malawi, Part 2

I toured the UNC Project today, and shook hands with and chatted with scores of people. They each are smiling, dedicated people—I am really impressed with the work here

Day Nine: May 31

Reflections on My Last Day in Lilongwe

I have really enjoyed getting to know the UNC Project and the team that leads it. Dr. Martinson is Ghanaian, and he received his PhD in epidemiology from UNC School of Public Health

ARTICLE CONTINUED ON PAGE 36

What I love about UNC:

My scholarship and what it's meant to me

BY EMILY CHANG, MD

I have been a John Foust Scholarship recipient for two years now, and I have been so thankful and appreciative. When I was asked to speak about this topic to a room full of donors to countless scholarships for medical students, I was at first nervous and unsure of what to say. But having spent more time on the microphone than I had originally intended during my fourth year thus far has really emboldened me to speak in front of crowds, and since this topic is one I feel so passionately about, I realized that it wouldn't be hard.

To give you a full understanding of what my scholarship has meant to me, I have to give a little history about myself. I came to Chapel Hill when I was one year old. So I wasn't quite Tar-Heel born, but when I sing, "I'm a Tar-Heel born, I'm a Tar-Heel bred, and when I die I'm a Tar-Heel dead," I pretty much mean it. I went to school in the Chapel Hill/Carrboro school system until I graduated from high school. At that time I went coast-to-coast-to-coast through various lives. When I finally made the decision to go to medical school, and when I came to UNC for my interview, I can only describe the feeling as one of "coming home." I had avoided coming back home for many years after leaving in 1991, but when I returned in 2003, I was ready. I had been to many other places and realized nothing was quite as perfect for me as Chapel Hill. So I came back, although it was actually quite hard to get them to let me. I wrote Dr. [Axalla] Hoole [associate dean of admissions, School of Medicine] a letter telling him that "he wouldn't regret it if he gave me a ticket to UNC." I'll have to check with him after I graduate on May 13 to see if he regrets it!

So fast forwarding now through my four years in medical school—which were wonderful, I never once regretted my decision to go to medical school, which was not true of my previous professions—in this,

So I wasn't quite Tar-Heel born, but when I sing, "I'm a Tar-Heel born, I'm a Tar-Heel bred, and when I die I'm a Tar-Heel dead," I pretty much mean it.

my fourth year of medical school, when I was asked to speak about what my scholarship has meant to me, the only things that I could think of were all the things I love about UNC medical school. And they were all running around in my head, jumbled about, keeping me up at night thinking about them.

[Editor's note: At this point in her speech, Dr. Chang unfurled a large poster-sized piece of paper emblazoned with multicolored words and phrases that describe her experience at the UNC School of Medicine] There are a few key things I want to point out on this chart which help me to illustrate what my scholarship has meant to me. The first is a pertinent negative. You will notice that there is no mention of dollars, debt, bargain school, or anything like that on the diagram. The reason is because I feel strongly that what UNC means to me has nothing to do with the excellent deal you can get at this school. In fact, when people refer to UNC School of Medicine as the best school for your money, I have to say that that offends me. I think of it as the best school period. It's just a bonus that it comes at such a bargain. So I tried to think of an analogy to illustrate my thoughts. And what I came up with is a department store analogy. On the one hand there is Roses [department store], a well known fixture in the University Mall which is extremely cheap, but the stuff you get there is not the highest quality. It'll pass, but it's really not high quality. Then there are department stores like Neiman Marcus—otherwise known as "Neidless Marcup"—where you pay exorbitant prices for regular clothes. Then there are stores like Belk's or Dillard's where you have reasonable prices for high quality items, quite similar or even better than the items you get at Neidless Marcup. Well, to me, UNC is like the Belk's or Dillard's of medical schools: extremely high quality at very reasonable prices.

Back to the diagram. I would also like to point out pertinent positive of the item "People." To me, this was the most important of all the reasons why I love UNC. And it is what sets UNC apart from other places. And the people come in all forms, from faculty to patients to staff to classmates to faculty to alumni and back to faculty. The people that I have met and gotten to know during my four years here have become like family to me. I have so much respect and admiration for them. This is why I want to stay here for my residency. Where else could I find such amazing people all around me, everywhere I look? I have never met such caring, brilliant, devoted and compassionate faculty as I have here at UNC. What a pleasure to have had the opportunity to learn from them, and I hope that I keep learning from them because there is so much to learn.

So to address the original topic, what my scholarship has meant to me, I would say that having this scholarship has allowed me to not worry about money as much as I would have and be able to focus my attention on the things that matter most - the people at UNC. And for that I am immensely thankful because what greater thing is there in life than to be surrounded by people that you admire, respect, love and that hopefully feel some of the same for you?

So to sum it up, I quote Effie White—played first by Jennifer Holliday, and more recently by Jennifer Hudson—in the musical "Dreamgirls":

"And I am telling you I'm not going. You're the best [thing] I've ever known. And you're gonna love me."

Chang is the president of the UNC School of Medicine's Class of 2007. She gave this presentation last spring at the 2007 Annual Medical Foundation Co Founder's event at UNC.

There are no answers to human suffering.
Just my chance to help create sunrises when there is only darkness,
and sing lullabies to life's forgotten children.

AN EXCERPT FROM SACHIN PATEL'S POEM "CALL ROOM"

A DOCTOR, A POET (AND A GENTLEMAN)

BY EDWARD BYRNES

It is rare that a single essay can propel a man through medical school. But it does happen.

Just ask UNC's Sachin Patel, MD, a third-year resident in internal medicine. A native of India who grew up in Minnesota, Dr. Patel majored in English and pre-med at Carleton College. After graduation, while taking a year off between his undergraduate and medical school studies, he began to seriously try his hand at writing.

"When I was in Minneapolis, I wrote and performed a lot of poetry at various functions. I was also writing essays for newspapers and some journals" says Patel.

It was during his first year in medical school at the University of Minnesota that his writing really solidified. It was a time of much soul searching for Patel, and he wrote about his contemplations of leaving medical school in an essay titled "Through the Microscope of Humanity." It was published in the winter 2002-2003 issue of the *Journal of the American Association of Physicians of Indian Origin* (AAPI).

The one-page essay was not only about his thoughts of leaving med school, it also touched on his childhood ambitions, his love of language, his grandmother, and his passion for healing. By essay's end, he had discovered a reliable source of strength from which to draw during his study of medicine.

One of his fellow medical students encouraged Patel to submit the essay in an application for a scholarship from the Joseph Collins Foundation, created to assist "ambitious and determined" students in their study of medicine. Applicants are specifically judged on their interest in "arts and letters or other cultural pursuits outside the field of medicine."

"...It never ceases to amaze me how much people go through on an emotional level that's associated with medical illness," Patel says.

Patel won the $40,000 scholarship.

"That really kept me going. I even began to seriously consider writing as a potential career or second career," he says.

And the student who encouraged Patel to apply for the scholarship? Her name is Laura, and she and Patel were married one week after they both graduated from medical school in 2005.

Recently, one of Patel's poems was published in a volume titled "Body Language: Poems of the Medical Training Experience" (BOA Editions, 2006). His poem "Call Room" explores the personal and social crises behind the patients he treats.

"I wrote the first draft when I was on call in pediatrics at the Hennepin County Medical Center in Minneapolis. It was literally a quiet night and that's how the poem begins, the sounds that I hear and the things that I've seen there, and it expands into my rotations in psychiatry and internal medicine and all the human stories that you see as a medical student and now as an intern and a resident. It never ceases to amaze me how much people go through on an emotional level that's associated with medical illness," Patel says.

Something I want to do is to really examine medical humanities. It's a growing discipline, and I really want to pursue this in some way in the future," says Patel.

UNC and Rex: Partners in Care

The UNC and Rex partnership, now in its seventh year, is only getting stronger

By Dick Broom

Photo by Brian Strickland

Every day, 98 people move to Wake County, many of them from out of state. That's 2,980 new people a month, 35,770 a year.

While many of these newcomers may never have heard of Rex Hospital in Raleigh, they almost certainly have heard of the University of North Carolina at Chapel Hill. And if they know anything at all about UNC, aside from its basketball prowess, it is likely to be the reputation of the School of Medicine and UNC Hospitals.

Rex has been part of the UNC Health Care System since 2000, but cooperative initiatives have mostly taken place quietly and out of the public eye. Now, that is changing. Rex has made a strategic decision to promote its affiliation with UNC and align itself with the UNC brand while emphasizing its position as the hospital of choice in Wake County.

UNC Hospitals, for its part, is counting on its partnership with Rex to create opportunities for extending the services of an academic medical center to more people in the Triangle, particularly in Wake County.

"UNC and Rex are two proud institutions with rich traditions going back more than 100 years each," says William Roper, MD, MPH, dean of the School of Medicine and CEO of the UNC Health Care system. "Working together, we can bring patient care capabilities to areas of the Triangle in ways that neither of us could do alone. What this means is that people are going to have access to a broader range of services in more convenient locations. They won't necessarily have to drive to UNC or Rex, but will be able to get the best medical care in satellite locations."

So far, the most visible example of collaboration between the two formerly separate institutions is the UNC Specialty Women's Center at Rex. Physicians from the UNC Department of Obstetrics and Gynecology offer care in the areas of gynecologic oncology, maternal-fetal medicine, reproductive endocrinology and fertility, and urogynecology and reconstructive pelvic surgery.

"The Women's Center has been the biggest success story of our partnership so far," says David Strong, president of Rex Healthcare. "Our local

OB-GYN physicians wanted these services because there wasn't anything like this center in Raleigh. As we go forward, the UNC Women's Center at Rex is going to be a great model for jointly providing subspecialty services that may not currently exist in this community."

Cancer care and research are areas in which there is likely to be much closer cooperation. Rex has a strong clinical cancer program, and the UNC Lineberger Comprehensive Cancer Center is one of the nation's leading cancer research institutions. The North Carolina Cancer Hospital, scheduled to open at UNC Hospitals in 2009, will be a world-class center for complex cancer care.

"We are excited about participating with UNC in clinical trials and other research and providing clinical services together in suburban Raleigh," Strong says.

UNC and Rex also are exploring possibilities for opening offices in Raleigh staffed by UNC subspecialists in pediatrics and surgery. Rex Healthcare recently purchased land on the northwest side of Cary known as Panther Creek, where it plans to build a facility for UNC and Rex clinics.

Those are some of the joint programmatic initiatives that are either in place or on the horizon. As for tying UNC and Rex together more closely in the public's mind, Rex has unveiled its new logo and is launching an advertising campaign that, for the first time, strongly identifies Rex as a member of the UNC family. UNC's iconic Old Well is now part of the Rex logo, which combines the color purple, long associated with Rex, with Carolina blue.

"It will be good for UNC and good for Rex to present ourselves to the market with a new graphic identity that melds the two brands," Roper says.

The decision to do that—and to do it now—was based largely on research that Rex conducted over the past year. The results clearly indicated that Rex's position in the Wake County market could be strengthened by a greater public awareness of its partnership with UNC.

After interviewing physicians, community leaders and other key stakeholders, and holding focus group sessions with Rex employees, the hospital's marketing department commissioned a survey of Wake County residents to measure their awareness and perception of area hospitals. Eight hundred people took the survey.

"Rex was the leader for top-of-mind awareness among all hospitals in the area among Wake County residents, and we were the overall preference leader," says Lisa Schiller, Rex's director of marketing. "We were the leader in almost every clinical service line. We also were number one in people's perceptions of most of the attributes we asked about, such as best doctors and best nurses."

Hospitals, like politicians, try to make sure their positive characteristics, as people perceive them, far outweigh their negatives. Nationally, an 8:1 positive to negative ratio is considered good. Among those who responded to the Rex survey, UNC was the best among the Triangle's hospitals with a 15.3:1 ratio, and Rex was second at 12.6:1.

The two hospitals also ranked first and second in survey respondents' perceptions of the quality of area hospitals. On a four-point scale, UNC scored 3.47; Rex was at 3.44.

One of the few disappointing findings of the survey was that people in Wake County didn't think of Rex as being as high tech as it is. Rex ranked third among Raleigh hospitals, despite having the most technologically advanced operating rooms in the Southeast and having been the first hospital in the area to fully integrate electronic medical records.

"But as we all know, in the marketplace, perception is reality," Schiller says. "That survey result strongly suggests that Rex can benefit by leveraging UNC's reputation for being high tech."

A somewhat surprising survey finding, given

ARTICLE CONTINUED ON PAGE 34

Study implicates protein as a trigger of advanced prostate cancer recurrence

Scientists with the Lineberger Comprehensive Cancer Center at the University of North Carolina at Chapel Hill have for the first time implicated a growth-promoting cellular protein as one trigger of the inevitable recurrence of advanced prostate cancer in men who are undergoing drug treatment to shut down their sex hormones, or androgens.

The new research may help solve a mystery: why does prostate cancer recur in men treated to get rid of circulating androgens such as testosterone? Moreover, because chemotherapy after recurrence extends life by only a few months, the new research, "raises the exciting possibility that we can develop a specific drug against this," said senior study co-author Young Whang, MD, associate professor of medicine at UNC-Chapel Hill. The study appeared in the *Proceedings of the National Academy of Sciences* on May 15.

MRI screening of opposite breast necessary for women with recent breast cancer diagnosis, study finds

Women with a recent diagnosis of cancer in one breast should have MRI screening of the opposite breast, concludes a multi-center study involving University of North Carolina at Chapel Hill researchers. The international research team found that magnetic resonance imaging (MRI) detected cancer in the opposite breast in 3.1 percent of 969 women who had recently been diagnosed with cancer in one breast only. The cancers in the opposite breast were missed by previous mammography and clinical exam.

Study co-author Etta Pisano, MD, Kenan professor of radiology and biomedical engineering at the UNC School of Medicine, said the percentage of cancers found in the opposite breast was huge. "If you were to screen the opposite breast with mammography in the general population, you would expect to find four to seven cancers per 1,000 patients. This study found three per 100, nearly 10 times higher."

The study was conducted by the American College of Radiology Imaging Network (ACRIN) and funded by The National Cancer Institute research. The results appeared in the March 29 issue of *The New England Journal of Medicine*.

High-fruit, low-meat diet reduces colon cancer risk, UNC study finds

People who eat a high-fruit, low-meat diet have about half the risk of developing precancerous colon polyps than those who eat a high-meat diet, University of North Carolina at Chapel Hill researchers have found.

Surprisingly, the study also found that people who eat a high-vegetable, moderate-meat diet have essentially the same risk of developing a colorectal adenoma as the high-meat group, said Gregory Austin, MD, a clinical fellow in gastroenterology at UNC Hospitals and lead author of the study, which was published in the April 2007 issue of the *Journal of Nutrition*.

Austin's co-authors, all from UNC, are Linda S. Adair, PhD, and Jessie A. Satia, PhD, both from the Department of Nutrition; and Joseph A. Galanko, PhD, and Christopher F. Martin, MSPH, both from the Division of Gastroenterology and Hepatology in the School of Medicine. Senior author Robert S. Sandler, MD, MPH, is chief of the Division of Gastroenterology and Hepatology.

Connection between weight, self-esteem linked to teen's race, gender

Among young teens, race and gender affect whether self-esteem is linked to body weight, University of North Carolina at Chapel Hill researchers have found.

"We know that for many teenagers, how they feel about their bodies and how they feel about themselves are nearly identical," said Eliana Miller Perrin, MD, lead study author and an assistant professor of pediatrics in the UNC School of Medicine. "We're trying to figure out whether some teenagers separate the two—body and self. If we can figure that out, we—as practitioners and parents—might be able to help teenagers feel better about themselves."

The researchers analyzed data from a survey of media use, health and sexuality among more than 1,000 seventh and eighth graders. The teens answered questions intended to measure their self-perceived attractiveness, self-esteem, depression, desire to lose weight, height and weight, physical activity, athleticism, ethnic identification and media exposure.

Perrin presented the study results May 5 at the Pediatric Academic Societies' annual meeting in Toronto. Perrin's co-authors, all from UNC, are Kristin Kenneavy, PhD, Kelly L. L'Engle, MPH, Cynthia M. Bulik, PhD, Penny Gordon-Larsen, PhD and Jane D. Brown, PhD.

North Carolina pediatric program selected as federal model to solve national crisis in access to specialty care for children with complex conditions

North Carolina pediatricians and family medicine physicians are currently spearheading a program that has been singled out by the U.S. Department of Health and Human Services, Health Resources and Services Administration's Maternal and Child Health Bureau as a model to solve the nation's severe shortage of subspecialty pediatricians.

The Improving Pediatric Access through Collaborative Care (IMPACC) program, which links primary care physicians (PCPs) to pediatric subspecialists, was developed by North Carolina Children's Hospital, UNC-Chapel Hill, and N.C. Medicaid using its Community Care of North Carolina and AccessCare programs—which are networks of PCPs dedicated to improving Medicaid care. The initiative, launched late last year, is the only program selected to serve as a national pilot to improve access to specialty pediatric care for the nation's children and

adolescents, especially those who have complex, chronic conditions that require ongoing, coordinated care.

Alan D. Stiles, MD, chair of UNC's Department of Pediatrics, is principal investigator for IMPACC. The program, led by UNC Health Care and AccessCare, is the first statewide model for collaborative primary and specialty pediatric care.

Study sheds light on value of newer antipsychotic drugs for schizophrenia

A study comparing medications for schizophrenia found two of three newer antipsychotic drugs are more effective in patients who did not benefit from an older medication, according to a team led by University of North Carolina at Chapel Hill researchers.

The study is one of the latest stemming from the longstanding Clinical Antipsychotic Trials for Intervention Effectiveness (CATIE). Scott Stroup MD, MPH, associate professor of psychiatry in the UNC School of Medicine, is the lead author.

In the original CATIE study, 257 patients were selected randomly to take the older antipsychotic drug perphenazine. Of these, 192 discontinued the medication. Among those who discontinued, 114 agreed to be randomly chosen to take one of three newer antipsychotic medications—olanzapine, quetiapine or risperidone.

In the current study, Stroup and colleagues compared the effectiveness of the medications by determining how long patients stayed on their assigned medication. Those taking quetiapine stayed on the longest—averaging about 10 months. Those taking olanzapine discontinued after an average of about seven months, and those taking risperidone discontinued after an average of four months. The results appeared the March 2007 issue of *The American Journal of Psychiatry*.

CATIE, a $42.6 million multi-site study, was funded by the National Institute of Mental Health and led by UNC researchers. Since the original study concluded, new studies are continuing within the Schizophrenia Trials Network, which was set up for CATIE and is headed by UNC.

UNC program that teaches deaf children to listen and talk opens branch in Wilmington

A UNC Health Care program that teaches deaf children how to listen and talk has opened a satellite branch in Wilmington, N.C.

For the past five years, the W. Paul Biggers Carolina Children's Communicative Disorders Program has operated a center in Durham called CASTLE (Center for Acquisition of Spoken language Through Listening Enrichment). The program is operated by the Department of Otolaryngology/Head and Neck Surgery in the UNC-Chapel Hill School of Medicine.

The opening of the new CASTLE branch in Wilmington brings services and training closer to families and schools in southeast North Carolina, said Carolyn Brown, the program's director. Later this year the program plans to move into a facility being built next door.

"CASTLE in Wilmington will provide direct services to children and their families, including auditory-based intervention, evaluations, and a model preschool program, Brown said. Clinical otologic and audiology services, as well as cochlear implant evaluations, will continue to be provided only at UNC facilities in Durham and Chapel Hill.

Clinical trial of combination hearing aid-cochlear implant device opens at UNC

The University of North Carolina at Chapel Hill has opened a national clinical trial of a hearing device that combines hearing aid and cochlear implant technology in the same ear.

In surgeries performed in April, two North Carolina adults with late-onset hearing loss became the first people in the U.S. to receive an implant of the Electro-Acoustic System (EAS). The hearing aid acoustically amplifies low frequencies, while the cochlear implant electrically stimulates the middle and high frequencies. The inner ear processes acoustic and electric stimuli simultaneously.

The multi-center Phase III clinical trial will determine if the device improves speech perception and sound quality for people with late-onset hearing loss who are able to hear low frequencies to a certain extent but have little or no hearing at higher frequencies. The device is designed to help people who have enough residual hearing that they would not be considered candidates for a traditional cochlear implant procedure. It is investigational and is not approved by the U.S. Food and Drug Administration.

Sun exposure early in life linked to specific skin cancer gene mutation

New research from scientists at UNC's schools of medicine and public health indicates that early life sun exposure, from birth to 20 years old, may specifically increase the risk of melanomas with BRAF gene mutations. A different mutation, on the NRAS gene, was found in patients who had sun exposure later in life (between ages 50 to 60 years old). The results indicate that different subtypes of melanoma are associated with different risk factors.

This finding is expected to strengthen current recommendations to protect children from sun exposure in order to prevent melanoma, said Nancy Thomas, MD, PhD, associate professor of dermatology in the UNC School of Medicine, a member of the UNC Lineberger Comprehensive Cancer Center and lead author of the study.

The study, published in the May 2007 edition of the journal *Cancer Epidemiology Biomarkers and Prevention*, presents some of the first data to link early life sunlight exposure to a specific mutation in melanoma. The findings come from the initial phase of an ongoing study that will ultimately include more than 1,000 patients from the U.S.

and Australia. The research was funded by the Dermatology Foundation, the National Cancer Institute and the UNC Lineberger Cancer Center.

Brain tissue reveals possible genetic trigger for schizophrenia

Scientists from the University of North Carolina at Chapel Hill may have identified a molecular mechanism involved in the development of schizophrenia. In studying the postmortem brain tissue of adults who had been diagnosed with schizophrenia, the researchers found that levels of certain gene-regulating molecules called microRNAs were lower among schizophrenia patients than in persons who were free of psychiatric illness.

"In many genetic diseases, such as Huntington's disease or cystic fibrosis, the basis is a gene mutation that leads to a malformed protein. But with other complex genetic disorders—such as schizophrenia, many cancers, and diabetes—we find not mutated proteins, but correctly formed proteins in incorrect amounts," said study lead author and UNC professor of psychiatry Diana Perkins, MD.

The research appeared earlier this year in the online edition of the journal *Genome Biology*. "To our knowledge this study is the first to associate altered expression of microRNAs with schizophrenia," the authors stated.

Health disparities in prostate cancer stem from lack of care, not lack of knowledge

Decreasing the rates of prostate cancer among black men may require improving access to routine health care, rather than increased education about the disease, a study from the UNC-Chapel Hill School of Medicine suggests.

"African-American men were aware of their increased risk of prostate cancer, and they felt responsible for getting themselves to physicians for preventative care. But there were substantial barriers to their carrying out what they saw as being important," said the study's senior author, Paul A. Godley, MD, PhD, associate professor of hematology and oncology in UNC's School of Medicine and Lineberger Comprehensive Cancer Center.

Black men are more likely than white men to get prostate cancer, and their death rate from the disease is more than two times higher, according to the American Cancer Society. James A. Talcott, MD, SM, of the Massachusetts General Hospital Cancer Center and Harvard Medical School is the lead author. The authors plan to release analysis of additional data from the survey in a separate study.

UNC scientists discover cellular "SOS" signal in response to UV skin damage

New research from the UNC-Chapel Hill School of Medicine has identified two proteins that may help protect against skin cancer. The study, which appears in the online edition of the journal *Molecular and Cellular Biology*, indicates that two proteins, named Timeless and Tipin, form a complex that regulates the rate at which DNA is replicated after exposure to ultraviolet radiation.

Ultraviolet radiation in sunlight damages the DNA in skin cells. If left unrepaired by the cell, this damage can turn into mutations that lead to cancer. Before cells divide, they must replicate, or copy, their DNA to form new daughter cells. If damage in the DNA is discovered even after the cell has given a "go-ahead" to replicate its DNA, the Timeless/Tipin complex sends a signal throughout the nucleus of the cell to slow the rate of replication. This slowdown may give the cell additional time to repair its DNA and potentially save itself from becoming cancerous or from dying in response to ultraviolet radiation.

"What we discovered here was that the cell can send out an additional SOS and slow DNA replication even after it has begun," said William Kaufmann, PhD, a professor of pathology and laboratory medicine and a member of the UNC Lineberger Comprehensive Cancer Center and Center for Environmental Health and Susceptibility. This study was supported by the National Institute of Environmental Health Sciences and the National Cancer Institute.

UNC sponsors science boot camp for court judges

Roughly 60 judges from nine southeastern states, Puerto Rico and the Virgin Islands participated in the first Southeast Regional Science and Technology Boot Camp May 3-5, sponsored by the UNC-Chapel Hill Department of Genetics and the Advanced Science and Technology Adjudication Resource Center (ASTAR) in Washington, D.C.

Participants included municipal, state and state supreme court judges. Several Federal Appellate Court judges were also in attendance. The program was aimed at helping the judges become better judicial gatekeepers and adjudicators in biomedical science-related cases brought before the courts.

Through lectures, discussions, hands-on laboratory demonstrations, and small group "adjudication clinics," the program offers a crash course in basic genetics and considers issues such as medical genetics and dilemmas in counseling, principles of gene therapy, principles and controversies in human subjects research, principles of DNA forensics, and a session on stem cell genetics.

"With regard to stem cells, myriad laws are under consideration and some have been already passed at the state level. So it's almost inevitable that stem cell controversies will end up as courtroom cases," said chief science adviser James P. Evans, MD, PhD, professor of genetics and medicine at UNC's School of Medicine, director of clinical cancer genetics at the UNC Lineberger Comprehensive Cancer Center and director of the Bryson Program in Human Genetics.

In March 2006, UNC and ASTAR sponsored the first National Judges' Medical School that focused on the biogenetic and environmental triggers and treatment of cancer.

Once again one of America's best

Six medical specialties at UNC Hospitals rank among the top 50 programs of their kind nationwide according to rankings published in the July 23 issue of *U.S. News & World Report* magazine.

The UNC Hospitals' programs, and their top-50 rankings, are:

- Cancer, 40
- Ear, Nose & Throat, 38
- Gynecology, 24
- Kidney Disease, 28
- Respiratory Disorders, 25
- Urology, 43

The magazine unveiled the rankings in July for its 18th annual "America's Best Hospitals" issue. UNC Hospitals has been included in the rankings for the last 15 years consecutively.

"To have multiple specialties ranked for the past 15 years is an extreme accomplishment made possible only through the innovation and expertise of our faculty and staff," said William L. Roper, MD, MPH, dean of the UNC School of Medicine and CEO of UNC Health Care. "These rankings are yet another sign of our commitment to caring for the people of North Carolina."

According to *U.S. News*, only 173 hospitals nationwide out of 5,462 that were evaluated scored highly enough to be ranked in one or more specialties. To be eligible for ranking in 12 of the 16 specialties ranked by *U.S. News*, hospitals had to meet any of three standards: membership in the Council of Teaching Hospitals, affiliation with a medical school, or availability of at least six out of 13 advanced services such as image-guided radiation therapy and robotic surgery. This year, more than three quarters of all hospitals failed to meet this requirement.

Brief descriptions of each of UNC's ranked programs follow:

Cancer (ranked 40th):

Cancer care at UNC is coordinated through the UNC Lineberger Comprehensive Cancer Center by Richard Goldberg, MD, associate director and physician-in-chief of the North Carolina Cancer Hospital. The Center, established in 1975, is headed by Shelton Earp, MD, director, and is one of only 40 National Cancer Institute (NCI)-designated Comprehensive Cancer Centers. UNC Lineberger holds two Specialized Program of Research Excellence (SPORE) grants, one of eight in the U.S. for breast cancer and one of four in the U.S. for gastrointestinal (GI) cancers.

Ear, Nose And Throat (ranked 38th):

The Department of Otolaryngology/Head and Neck Surgery, headed by Harold C. Pillsbury III, MD, has a long history of excellence dating back to the opening of N.C. Memorial Hospital in 1952. In recent years the department has become known as a leader in cochlear implant surgery, which enables many deaf people to regain a functional level of hearing.

Gynecology (ranked 24th)

Gynecology services at UNC Hospitals are housed in the Department of Obstetrics and Gynecology, headed by

Thousands who face the fight with cancer will benefit from research developed from the University Cancer Research Fund. From left, cancer survivors Susan Lamar, Rocky Mount; Jack Hyer of Chapel Hill, and Melissa Blackwell of Mebane posed with William L. Roper, MD, MPH, dean of the UNC School of Medicine and CEO of the UNC Health Care System after the announcement of the fund. ***See story on following page.***

Daniel Clarke-Pearson, MD. The department is known as a leader in areas such as advanced laparoscopy and gynecologic surgery, treatment of gynecologic cancers and maternal-fetal medicine.

Kidney Disease (ranked 28th):

Patients with kidney problems receive excellent care through UNC's Division of Nephrology and Hypertension, headed by Ronald Falk, MD. Care for kidney patients is provided in seven outpatient clinics, plus the UNC Hospitals kidney and kidney transplant wards and community-based dialysis units in Burlington, Carrboro, Sanford, Siler City, Yanceyville and Pittsboro.

Respiratory Disorders (ranked 25th)

The Division of Pulmonary Critical Care Medicine, headed by James Donohue, MD, offers a broad array of clinical service in the diagnosis and treatment of pulmonary and critical care disorders. UNC is recognized as a leading center for cystic fibrosis research and treatment and for lung transplantation. The division also provides treatment for sleep disorders, sarcoidosis, alpha-1 antitrypsin deficiency and pulmonary hypertension. The faculty and staff also have considerable expertise and programs for common pulmonary problems, such as chronic obstructive pulmonary disease (COPD), asthma, smoking cessation, pulmonary fibrosis and pulmonary infections, including those due to bacteria and mycobacteria.

Urology (ranked 43rd)

Urology services at UNC are provided by the Division of Urologic Surgery, headed by Culley Carson, MD. The division's faculty have expertise in all areas of clinical urology and combine up-to-date knowledge of cutting-edge therapies with a solid understanding of fundamental principles

General Assembly establishes University Cancer Research Fund at UNC

The North Carolina General Assembly created the state's first University Cancer Research Fund with the passage of the new state budget. The fund, established to accelerate the battle against cancer at the University of North Carolina at Chapel Hill's School of Medicine and its Lineberger Comprehensive Cancer Center, will receive $25 million in 2007-2008 and is slated to increase to $50 million per year beginning in 2009. Governor Mike Easley signed the budget bill on July 31.

"There are 41,000 new cancer cases and 17,000 deaths annually in North Carolina, and more than 560,000 annual deaths nationally. Cancer is an economic, social and personal burden for our state and affected families," said William L. Roper, MD, MPH, dean of the School of Medicine and chief executive officer of the UNC Health Care System.

With this new funding, the UNC School of Medicine and UNC Lineberger are poised to become an international leader in cancer research, Roper said. The research funding will serve to improve the quality of life and treatment of cancer patients statewide and enhance UNC's access to science and technology. It will also increase UNC Lineberger's ability to discover and disseminate knowledge across the spectrum of cancer research, and make real improvements in prevention, early detection and therapies that will benefit all North Carolinians.

"With the support of the General Assembly for construction of the North Carolina Cancer Hospital in 2004, and now this extraordinary cancer research fund, UNC has been provided an opportunity and a challenge—to become the nation's best university cancer center," said Shelton Earp, MD, UNC Lineberger's director.

Molina inducted into American College of Radiology

Paul L. Molina, MD, FACR, has been inducted as a Fellow in the American College of Radiology (ACR). Molina is professor of radiology and executive vice chairman of the Department of Radiology at the University of North Carolina. Fellowship is one of the highest honors conferred by the ACR, a national nonprofit association serving more than 32,000 radiologists, radiation oncologists, interventional radiologists, nuclear medicine physicians and medical physicists.

School of Medicine professor elected to American Board of Family Medicine

The American Board of Family Medicine, the second largest medical specialty board in the U.S., elected Warren P. Newton, MD, MPH, to a five-year term on its board of directors. Newton is the William B. Aycock distinguished professor and chairman of the department of family medicine at the University of North Carolina at Chapel Hill.

Hunt, Magnuson elected to national academy

Carlton Cuyler Hunt, MD, professor emeritus of physiology, and Terry Magnuson, PhD, Sarah Graham Kenan professor, chair of genetics and director of the Carolina Center for Genome Sciences, have been elected as 2007 fellows of the American Academy of Arts and Sciences. Both are in the School of Medicine. Additionally, Jeff Dangl, John N. Couch professor of biology, microbiology and immunology and associate director of the Carolina Center for Genome Sciences, was elected into the National Academy of Sciences. UNC now has a total of 35 faculty members in the American Academy of Arts and Sciences and 12 in the National Academy of Science.

Terry Magnuson

UNC's Dr. David Grimes honored by Royal College of Obstetricians and Gynaecologists

David A. Grimes, MD, will receive an honorary fellowship from the Faculty of Family Planning and Reproductive Health Care of the Royal College of Obstetricians and Gynaecologists. The award, which is bestowed on persons of eminence who have rendered exceptional services to the science or practice of sexual and reproductive health care, was presented to Grimes during a ceremony last spring in London, England. Grimes is a clinical professor of obstetrics and gynecology and a fellow at UNC's Cecil G. Sheps Center for Health Services Research. He also is vice president for biomedical affairs at Family Health International in Research Triangle Park. He is one of a small number of physicians nationwide who is board-certified in both obstetrics and gynecology and preventive medicine.

Sullivan appointed distinguished professor

Patrick Sullivan, MD, a professor of psychiatry and genetics in the UNC School of Medicine, has been appointed as the first Ray M. Hayworth Distinguished Professor of Psychiatry. Dr. Sullivan studies the genetics of psychiatric disorders. According to David Rubinow, MD, chairman of UNC's department of psychiatry, Sullivan is also "an unusually talented statistical geneticist. His rigor, creativity, perspicacity, and perspicuity make him a frequently sought collaborator and teacher. Through his efforts and insights, the promise of identifying meaningful genetic contributions to the susceptibility to mood disorders is likely to be fulfilled."

Runyan named national program director of RWJ Foundation Clinical Scholars Program

Desmond K. Runyan, MD, DrPH, has been named national program director of the Robert Wood Johnson Foundation Clinical Scholars Program. Dr. Runyan, professor of pediatrics and chair of the Department of Social Medicine at UNC at Chapel Hill from 1999 to 2007, succeeds Stanford's Iris F. Litt, MD, who has directed the Clinical Scholars Program since 2003. The Clinical Scholars Program is designed to augment the clinical training of young physicians by providing new skills and perspectives necessary to achieving leadership positions both within and outside the walls of academia. It is RWJF's oldest program and has produced more than 1,000 scholars, many of whom have gone on to become leaders in their fields.

Drossman honored by Foundation for Digestive Health and Nutrition

The American Gastroenterological Association (AGA) Foundation for Digestive Health and Nutrition recently honored Douglas A. Drossman, MD, for his exemplary contributions to gastroenterology through mentoring. The 2007 Mentors Research Scholar Award (RSA) will be permanently endowed in his name and the names of his fellow honorees. The 2007 Mentors RSA is a three-year grant that will enable promising young scientists to establish independent careers in digestive disease research. It will be awarded to a promising young scientist once every three years in perpetuity, through a highly-competitive process.

Zylka wins national honor for young faculty in science

Mark Zylka, PhD, assistant professor of cell and molecular physiology in the UNC School of Medicine, has been named a 2007 Searle Scholar, which provides $240,000 over three years in support of his research on neural circuits and pain. The Searle Scholars award supports exceptional young faculty across the biomedical sciences and in chemistry.

Professor Jackson Roush receives American Academy of Audiology award

Jackson Roush, PhD, professor and director of the School of Medicine's Division of Speech and Hearing Sciences, recently received the 2007 Presidential Award from the American Academy of Audiology. The award was presented to Roush "in grateful appreciation for his significant contributions to the American Academy of Audiology and the audiology profession," and in recognition of his leadership in expanding the quantity and quality of clinical externship sites and preceptors for doctoral students in audiology.

Sharpless garners Burroughs Wellcome grant

Norman E. Sharpless, MD, assistant professor of medicine and genetics at the UNC School of Medicine, has been awarded one of 11 Clinical Scientist Awards in Translational Research by the Burroughs Wellcome Fund. The five-year $750,000 awards are intended to support established independent physician-scientists who are dedicated to translational research—the two-way transfer between laboratory research and patient treatment—and mentoring physician-scientist trainees. Sharpless, a UNC Lineberger Comprehensive Cancer Center member, will use the funds to support his research on the role of tumor suppressor proteins in stem cell aging.

Calhoun receives award from National Headache Foundation

Anne H. Calhoun, MD, an associate professor of neurology at the University of North Carolina at Chapel Hill, has won the National Headache Foundation Lectureship Award. The award is for a research abstract by Calhoun titled, "Behavioral Sleep Modification May Revert Transformed Migraine to Episodic Migraine." The abstract is based on research she conducted in the Headache Clinic at UNC Hospitals. Calhoun received a $2,500 cash award and presented her lecture at the National Headache Foundation's 4th Annual Headache Research Summit in Rancho Mirage, Calif., earlier this year.

Burkhart honored for making a difference by American Academy of Dermatology

Craig Burkhart, MD, a resident physician in dermatology at UNC Hospitals, has been selected by the American Academy of Dermatology to receive its Member Making a Difference Award. Burkhart is being recognized for his work in organizing a new dermatology clinic in Carrboro, in collaboration with UNC's Student Health Action Coalition (SHAC). SHAC provides free general medical care to those in need. He will be honored at an awards luncheon at the 2008 American Academy of Dermatology Annual Meeting.

Strauss to be honored for cleft-craniofacial care achievements

Ronald Strauss, DMD, PhD, dental director of the UNC-Chapel Hill Craniofacial Center since 1977, has been named the recipient of the American Cleft Palate-Craniofacial Association's highest honor, the Honors of the Association Award. Strauss also is chairman and Dental Friends distinguished professor within the UNC School of Dentistry's Department of Dental Ecology, as well as a professor in the School of Medicine's Department of Social Medicine.

O'Malley honored with 2007 Massey Award

Michael S. O'Malley, PhD, associate director of the UNC Lineberger Comprehensive Cancer Center, was one of six UNC employees honored this past spring with the 2007 Clinical Massey Distinguished Service Award, one of the most coveted honors bestowed by

the university. Chancellor James Moeser selected this year's recipients based on nominations submitted by the campus community. Each honoree receives an award citation and a $6,000 stipend. The late C. Knox Massey of Durham created the Massey awards in 1980 to recognize "unusual, meritorious or superior contributions" by university employees.

Colindres receives Alumni Association's Distinguished Faculty Award

Romulo Colindres, MD, MSPH, a long-standing faculty member in UNC-Chapel Hill's Department of Nephrology, is the recipient of the 2007 Medical Alumni Association's Distinguished Faculty Award. Colindres is a professor and director of both the Nephrology Training Program and the Hypertension Clinic. The Distinguished Faculty Award honors faculty members who have provided outstanding service to the alumni of the UNC-Chapel Hill School of Medicine and the people of North Carolina.

Corbie-Smith, Department of Psychiatry among public service award honorees

The Carolina Center for Public Service at UNC-Chapel Hill recognized Giselle Corbie-Smith, MD, MSc, with the Robert E. Bryan Public Service Award, which recognizes individual students, staff and faculty for exemplary public service efforts. Corbie-Smith, an associate professor in the School of Medicine, is the principal investigator for Project GRACE, a collaborative partnership working to eliminate health disparities in communities in Edgecombe and Nash counties.

The Department of Psychiatry in the School of Medicine was recognized for their Outreach and Support Intervention Services (OASIS). OASIS is a specialized treatment program that identifies and treats individuals in the early stages of a psychotic illness with the goal of increasing the likelihood of a sustained symptomatic and functional recovery. The services provided include psychiatric and psychosocial assessment, individual and group psychotherapy, community support, and family support and psychoeducation.

UNC physician writes innovative educational guide for diabetics

Darren DeWalt, MD, MPH, assistant professor of general medicine and epidemiology at the University of North Carolina at Chapel Hill, is the author of a new book titled, "Living With Diabetes: An Everyday Guide for You and Your Family." Published and distributed by the American College of Physicians, this self-management guide for patients covers diet, exercise, monitoring blood sugar, insulin, and other medications. The book is available in English and Spanish.

Anesthesiology department recognizes faculty, appoints leadership

Randall F. Coombs, MD, associate professor of anesthesiology, received the Faculty Teaching Award in appreciation of teaching excellence from the residents of the Department of Anesthesiology for the academic year 2006-07. The anesthesiology residents presented this prestigious award to Coombs at the residents' graduation ceremony held last June. The residents recognized Dr. Coombs' excellence in teaching, caring, and his leadership in the creation of the very popular regional anesthesia rotation.

Anthony N. Passannante, MD, professor of anesthesiology, has been recently appointed to the position of vice-chair for clinical operations for the anesthesiology department. Passannante has developed outstanding clinical programs within the department for the care of critically ill patients. He is nationally recognized as an expert in anesthesia for both liver transplantation and major vascular surgical interventions. He developed and directs the anesthesia liver transplantation team at UNC.

David C. Mayer, MD, professor of anesthesiology, obstetrics, and gynecology, has been appointed to the position of vice chair for education for the anesthesiology department. Mayer's major focus of clinical and teaching efforts has been in obstetrical anesthesiology. He has been the recipient of the Anesthesiology Faculty Teaching Award on multiple occasions. In his leadership roles in the department, he is also the director of CME and chairs the curriculum development committee.

UNC Medical Campus Goes Tobacco Free

Ashtrays, sandboxes, old smoky furniture and "designated smoking area" signs are but memories of a bygone era around the UNC Health Care and UNC School of Medicine campuses after a 100-percent tobacco-free policy went in effect on July 4 The new policy prohibits the use of tobacco products anywhere on UNC Health Care's property for employees, physicians, patients, visitors and anyone else on the property. Outlying and ancillary UNC Health Care facilities now also operate completely tobacco free. Many hospitals across the nation have joined this trend to restrict smoking in buildings and on the grounds of their facilities. Approximately 35 percent of the hospitals in North Carolina are either tobacco free or are in the process of becoming tobacco free, including Rex Healthcare, Chatham Hospital, Duke University Health System and Wake Medical Center.

"At a time when the surgeon general has reported that all Americans' health is at risk from second-hand smoke, we ... feel compelled to take immediate steps," said William L. Roper, MD, MPH, CEO of UNC Health Care, in a recent interview with the *Triangle Business Journal*.

UNC Health Care's previous policy prohibited tobacco use inside any UNC Health Care, UNC School of Medicine and Campus Health Services facility but allowed patients, visitors and staff to smoke in designated areas. Under this new policy, use of tobacco products is prohibited not only in the buildings, but also on the surrounding grounds, including parking areas, and pertains to employees, students, visitors, and patients in the UNC Hospitals, School of Medicine and Campus Health Services.

With tobacco use being the leading preventable cause of disease and death in the U.S., and secondhand smoke a proven contributor to respiratory infections, asthma, heart disease, and cancer, the UNC administration hopes this measure will create a healthier environment for everyone on the campuses and in the community. A recent report by the U.S. Surgeon General documents the serious and deadly health effects of involuntary exposure to tobacco smoke. Second-hand smoke is a major cause of disease, including lung cancer and coronary heart disease, in healthy nonsmokers. UNC Health Care's tobacco-free policy is intended to eliminate the potential for exposure to second-hand smoke and smokeless tobacco products on the Health Care System's campuses.

As part of the tobacco-free initiative, UNC Health Care has made resources available to patients, visitors and employees to help them quit smoking and using smokeless tobacco products. To assist employees who are interested in smoking cessation, services include nicotine replacement prescriptions, smoking cessation classes, and a nicotine dependence program outpatient clinic, which is led by Adam Goldstein, MD, MPH, associate professor of family medicine. For patients and visitors, a number of "Emergency Relief" packets are available for those who have the urge to smoke while at UNC Health Care. These packets are available in the lobby concourse, through the Guest Services Department and in the Emergency Department Nicorette gum is also available in N.C Memorial Hospital's Cranberry Corner Gift Shop.

The University s no smoking policy, a map showing the exact locat on of the tobacco free zone, and resources on smoking cessation can be can be found online at UNC's Environment, Health and Safety website, www ehs unc edu

Annual Fund surpasses $1 million for first time

For the first time ever, the Medical Foundation of North Carolina, Inc.'s Excellence and Loyalty Funds, the two unrestricted funds of the UNC School of Medicine, surpassed $1 million in cash received during a fiscal year (2006-07). The Excellence Fund—for annual gifts from non-alumni—raised $205,000. The Loyalty Fund—for annual gifts from alumni—raised $846,000, for a combined total of $1,051,000.

The Excellence Fund provides medical student scholarships, medical student research awards, nursing recognition awards, research seed grants, as well as supports programs like Family Day and the Student Health Action Coalition. The Excellence Fund supported two nursing recognition awards for this year's Nursing Staff Recognition week. The awardees, UNC Hospitals nurses Vikki Rowledge and Amy McPherson, each received a $2,500 award that can be used to offset educational expenses such as certification courses, an educational trip, book expenses, or other endeavors that enhance their skills and education in nursing care.

This past fiscal year, eight additional Loyalty Fund Scholarships were raised from alumni, building on the successful Medical Alumni Endowment Campaign that ended in April 2006. Endowed scholarships remain a high priority for the school, as 85 percent of medical students receive financial aid. The endowment payout is matched by current gifts to the Loyalty Fund to provide full in-state tuition scholarships. In fiscal year 2007-08, the scholarships will be $9,800 each. In addition to medical student scholarships, the Loyalty Fund also provides funding for important student, faculty and alumni programs, as well as the Health Sciences Library and educational technology support.

OB-GYN distinguished professorship established

The University of North Carolina at Chapel Hill School of Medicine has received a pledge of $666,000 from Timothy N. McGlaughlin, MD, for the establishment of a distinguished professorship in the name of his late wife, Catherine Sou-Mei Young, MD, who fell victim to cervical cancer in September 2006.

McGlaughlin's gift will be matched with $334,000 from the State of North Carolina to establish and name the Dr. Catherine Sou-Mei Young Distinguished Professorship in Obstetrics and Gynecology in the UNC School of Medicine.

"By creating a named distinguished professorship dedicated to research in cervical and other forms of women's cancer, we hope to honor Cathy's work as a physician and healer and to recognize her great love of family and friends," said Daniel Lyle Clarke-Pearson, MD, chairman of the Department of Obstetrics and Gynecology.

The $1,000,000 professorship will provide flexibility to the department to recruit or retain a nationally renowned clinician or researcher who specializes in cervical and other forms of women's cancer. Further, a distinguished professorship is a significant and enduring honor and one of the highest academic honors that the university can bestow on a member of its faculty. Selection of the distinguished professor will be consistent with the Board of Governors guidelines for the matching grants program, as well as existing university policies, and is contingent upon approval of the dean of the School of Medicine. The professorship will be awarded either to a current member of the department faculty, or used to attract a distinguished scholar, teacher, and researcher from outside the university. Individuals selected will be appointed at the rank of full professor.

Department of Otolaryngology/Head and Neck Surgery and the NC Children's Hospital receives Duke Endowment grant

This past spring, the Department of Otolaryngology/Head and Neck Surgery, the Division of Pediatric Pulmonology of the Department of Pediatrics, and the N.C. Children's Hospital received a two-year, $360,267 grant from The Duke Endowment to create a Pediatric Airway Center to care for the complex needs of children with airway disorders. The grant will help to create the first airway center for children in the southeastern U.S. and will be based at UNC Hospitals. The long-term purpose of this grant is to create an airway center that will provide coordinated, cutting-edge care for the children of North Carolina and beyond, while simultaneously reducing barriers to achieving the best outcomes for those patients.

Hyman L. Battle

Battle Foundation creates cancer research award

The Battle Foundation of Rocky Mount board of directors has elected to endow a distinguished cancer research award through the Medical Foundation of North Carolina, Inc., in support of cancer research at the University of North Carolina at Chapel Hill. The Hyman L. Battle Distinguished Cancer Research Award will be coordinated through the dean's office at the UNC School of Medicine annually beginning in spring 2008.

The award will mainly recognize outstanding basic science research, but may also recognize leading achievements in clinical research. The Battle Foundation has supported the Medical Foundation for more than 30 years through support of the Hyman L. Battle Distinguished Excellence in Teaching Awards for the Basic and Clinical Sciences. These $1,000 awards were increased to $5,000 each earlier this year.

"My family has been involved with The University of North Carolina at Chapel Hill and the Medical School for generations. We are pleased to indicate that the Battle Foundation will continue to contribute to UNC Medicine and to cancer research in this way," said Tom Battle.

The Battle Foundation, at the discretion of its board, will continue to provide annual gifts of approximately $20,000 to $25,000 to the Battle Cancer Research Award endowment.

ALUMNI NOTES

40's

Ira Abrahamson, CMED '46, received a Humanitarian Award. The Board of Directors and Trustees of the Medical Mission Hall of Fame unanimously elected Abrahamson, founder of Abrahamson Pediatric Eye Institute at Cincinnati Children's Hospital Medical Center, to the Class of 2007 Medical Mission Hall of Fame. The ceremony took place in March 2007.

50's

David L. Kelly, Jr., MD '59, a professor and former chairman of the Department of Neurosurgery at Wake Forest University Health Sciences in Winston-Salem, N.C., was the honored guest and Meritorious Award recipient at the 23rd Annual Meeting of the American Association of Neurological Surgeons/ Congress of Neurological Surgeons Section on Disorders of the Spine and Peripheral Nerves. The event took place in March 2007. He was previously the recipient of the Cushing Award, the highest medal awarded by the American Association of Neurological Surgeons.

60's

James D. Hundley, MD '67, an orthopedic surgeon in Wilmington, was one of three community leaders named as a winner of this year's Star-News Lifetime Achievement Award. The awards were created to honor people making outstanding contributions to Southeastern North Carolina. He was awarded the Order of the Long Leaf Pine, the state's highest civilian honor in February 2007. The award is presented to individuals who have contributed to the state through exemplary service to their communities, extraordinary work in their fields and years of dedication to their organizations.

80's

Judith Aronson, MD '85, has been named the L. Clarke Stout Professor of Anatomic Pathology in the Department of Pathology at the University of Texas Medical Branch in Galveston, Texas. Aronson is currently associate professor and vice chair for education in the Department of Pathology and is also director of the autopsy division at UTMB Hospitals.

David W. Boone, MD '87, a sports medicine and foot and ankle specialist at the Raleigh Orthopaedic Clinic, has been named president of the North Carolina Orthopaedic Association for 2007.

90's

Andy C. Kiser, MD '92, chief of thoracic surgery at FirstHealth Moore Regional Hospital, has pioneered the development of a new procedure, called "Ex Maze," that corrects atrial fibrillation. Kiser has presented scientific papers on this procedure at the American Heart Association Scientific Session in Boston in November and at the NewEra Cardiac Surgery Forum in California in January 2007. Earlier this year he travelled to Rome to present additional research to the International Society of Minimally Invasive Cardiac Surgery.

00's

Adam Zanation, MD '02, and **Paul Ossman, MD '06,** were recently honored with the 2007 Medical Staff Executive Committee House Officer Award from UNC Hospitals. They, along with three other resident physicians, were selected for the honor in recognition of their outstanding performance and compassion to patients and their families.

George Johnson, Jr., MD

April 6, 1926 – May 15, 2007

George Johnson, Jr., MD, professor emeritus of surgery, former chief of vascular surgery, vice chairman of the Department of Surgery, director of the Ambulatory Care Surgery Center, and coordinator of General Surgery, died May 15, 2007.

He was born April 6, 1926, in Wilmington, N.C. Johnson served in the South Pacific during World War II, rising to first lieutenant and receiving the Army Commendation Medal. Following service, he received a BS (and pre-medical certificate) in Medicine from the then two-year School of Medicine at the UNC-Chapel Hill. He graduated with an MD degree from Cornell in 1952, and completed surgery training at New York Hospital in 1959. The following year he was an instructor in surgery at Cornell. He briefly entered private practice in Durham, NC and was subsequently recruited by Dr. Nathan Womack to the faculty of UNC-Chapel Hill in 1959. During his long career with UNC, he rose from clinical instructor (1959) to professor (1969). He became the Roscoe B. G. Cowper Distinguished Professor in 1973. He served as vice-chairman, Department of Surgery, from 1977–1997 and associate chief of staff. He founded the Division of Vascular Surgery at UNC and was the under-graduate student clerkship director. In recent years, he directed the Ambulatory Surgery Service in the Ambulatory Care Center, where the operating rooms are named after him.

Johnson served on many institutional, state, and national committees. He became an advisor to the North Carolina Office of Emergency Medical Services in 1965, and served as chairman in 1977. He is credited with being among the first to advocate standards for ambulances. In recognition of his seminal contributions, the North Carolina Office of Emergency Medical Services established the George Johnson Award for Emergency Medical Services, for individuals who have made significant impact on EMS in the state. He served on the North Carolina Board of Medical Examiners. He won the Lifetime Achievement Award from the Society for Vascular Surgery, as well as from the Southern Association of Vascular Surgeons, of which he was a founding member.

Johnson held many national and international society offices. He was both North Carolina and national chair of the Committee on Trauma of the American College of Surgeons. He was president of the University Association for Emergency Medical Services, and president of the North Carolina Chapter of the American College of Surgeons, as well as the Durham-Orange County Medical Society. He was president of the International Society for Cardiovascular Surgery, and the Southern Association for Vascular Surgery. He was one of a handful of individuals to twice be elected to the Board of Governors of the American College of Surgeons. He served as a delegate to the American Medical Association, as well as a vascular surgery examiner for the American Board of Surgery.

Johnson received many awards and recognitions in his rich professional career and was named Kiwanian of the Year in 1962. He was named a distinguished professor by the Uniformed Services University of the Health Sciences in 1980. In 1987, he was the first winner of the H. Fleming Fuller Award, given by the University of North Carolina Hospitals to the most compassionate attending physician. He received the Teacher of the Year Award from the University of North Carolina surgery residents in 1990. He received the Distinguished Faculty Award of the University of North Carolina Alumni Association in 1991, and was listed in the book The Best Doctors in America. He received the Distinguished Surgeon Award in 1995 from the North Carolina Chapter of the American College of Surgeons.

Johnson was a rare physician, providing outstanding personal and surgical care to countless patients. He is considered the founder of vascular surgery in the Southeastern U.S., founding one of the first nine vascular surgery training programs in the country. He was a true citizen of medicine, serving and leading locally, nationally, and internationally. In October 1995, the George Johnson, Jr. Distinguished Professorship in Vascular Surgery was created at the University of North Carolina to recognize his achievements. His first vascular surgery trainee, Blair Keagy, MD, is the vascular surgery division chief and current holder of the George Johnson, Jr. Distinguished Professorship.

Johnson was a member of six editorial boards, as well as the author of over 200 scientific articles, chapters, and abstracts. His book, "Rose Greenough and the Blockade Runners, was being honored with a tea and book-signing at

the Horace Williams House in Chapel Hill when he suffered a serious stroke in 1996. Johnson's courage thereafter was an inspiration to all. He returned to as many of his professional activities as he felt possible.

In his later years, Johnson became a hospital volunteer several days each week at UNC Hospitals. In recognition of his contributions, he received the Elaine M. Hill Award for Distinguished Volunteer Service in 2005. Governor Easley named him a recipient of the Order of the Long Leaf Pine in 2006.

Johnson is survived by his wife Marian Ritchie of Concord, N.C.; four children: Sallie Hope, William, David, and Robert; and a sister, Sarah Johnson Durham, of Wilmington, N.C.

Sacha Adele Hardison Field, MD, of Cherry Hill, N.J., died April 23, 2007. Dr. Field completed her internship at UNC Hospitals (N.C. Memorial) from 1955 to 1957, where she worked in pediatrics, before finishing her residency at Denver Presbyterian Hospital, Denver Children's Hospital and at UNC Hospitals again, where she served as chief resident in Pediatrics. Field continued her research in pediatrics and infectious diseases at the National Institutes of Health in Maryland, Columbia University in New York and once again at UNC. She is survived by her three children and one granddaughter.

Janet Jordan Fischer, MD, died February 24, 2007 at the age of 83. She was a Phi Beta Kappa graduate from Vassar College in 1944 before graduating from the Johns Hopkins School of Medicine in 1948. Fischer served on the faculty of the UNC School of Medicine as Sarah Graham Kenan Professor in the Department of Medicine. She additionally served in the Department of Infectious Disease and the Department of Microbiology and Immunology during her tenure at the UNC School of Medicine. Her home was in Chapel Hill. She is survived by her husband, Newton D. Fischer, their five children and eight grandchildren, and her sister.

Henry Gerard "Gerry" Hartzog, III, MD '62, died June 15, 2007 at the age of 71. He was retired and living in Raleigh, N.C. Hartzog graduated from UNC-Chapel Hill with an AB in English in 1958, followed by his medical degree from the UNC School of Medicine in 1962. Upon completing his residency in surgery in 1967, Hartzog served two years in Vietnam with the U.S. Navy. Hartzog experienced a long, rewarding medical career notable for his service as clinical associate professor of surgery at UNC and chief of Surgery at both Rex Hospital and Wake Medical Center. He was president of many medical organizations throughout his career, among them the Wake County Medical Society, Royster Medical Society, Raleigh Academy of Medicine and the N.C. Surgical Association. Hartzog is survived by his wife, Joy; their four children and seven grandchildren; and his brother and sister.

Thomas Macklin Moss, MD '82, died April 16, 2007. Moss lived in Fountain Hills, Ariz., where he specialized in family practice. He was 51 years old.

Robert Ray Rascoe, Jr., CMED '44, died March 13, 2007 at the age of 84. His last residence was Havertown, Pa. A Certificate of Medicine graduate of the UNC School of Medicine in 1944, Rascoe attained his medical degree at the University of Pennsylvania School of Medicine in 1946. He specialized in obstetrics and gynecology. Rascoe is survived by his wife, Phyllis; their two children and one grandchild; and his brother.

Shirley Louise Rivers, CMED '48, died December 22, 2006. A resident of Phoenix, Ariz., Rivers obtained her CMED degree from the UNC School of Medicine in 1948. She completed her education at the Bowman Gray School of Medicine at Wake Forest University in 1950. Rivers was 81 years old.

John Tracy Roper, Jr., MD '90, died March 16, 2007 at the age of 44. Roper was an anesthesiologist at NorthEast Medical Center in Concord, N.C. After attending Wheaton College Roper graduated Phi Beta Kappa from UNC-Chapel Hill. He received his medical degree from the UNC School of Medicine in 1990. In addition to his large extended family, Roper is survived by his wife, Loren, and his daughter, Loren Jane.

Visuvasam Samuel, MD, died December 18, 2006. Dr. Samuel was a member of the house staff at UNC Hospitals (N.C. Memorial) from 1958 to 1959. He specialized in Neurology. Samuel was a resident of Fort Gratiot, Mich.

Eugene Franklin Shavender, MD '68, of Davidson, NC, died July 8, 2007. Shavender completed his undergraduate degree in psychology at UNC-Chapel Hill in 1964, prior to earning his medical degree at the UNC School of Medicine. He completed his residency in obstetrics and gynecology at the Medical University of South Carolina in Charleston. Shavender served the U.S. Navy for two years at NAS Albany (Ga.) as an OB/GYN physician. He then worked in private practice in Durham, N.C., for several years prior to his retirement in 1998. Subsequently, Shavender spent five years working as a physician for the developmentally disabled at the Murdoch Center in Butner, N.C. He is survived by his wife, Jane; their two children and three grandchildren, his mother and his sister.

John Lord Watters, CMED '50, died September 2, 2006 at the age of 82. After receiving his CMED degree from the UNC School of Medicine in 1950, Watters completed his medical degree at the University of Maryland School of Medicine in Baltimore, Md., in 1952. From there he went on to specialize in family practice. Watters was a resident of Raleigh, N.C.

James Allen Whitaker, CMED '31, died Dec. 19, 2006 in Rocky Mount, N.C. He finished his medical degree at Temple University in 1933. He fulfilled his residency at Columbia University Presbyterian Hospital in New York. Whitaker retired from Nash General Hospital in 1987. His specialty was urology.

UNC and Rex: Partners in Care

By Dick Broom

Continued from page 21

that Rex became part of UNC Health Care seven years ago, was that only 39 percent of respondents knew which Raleigh hospital was affiliated with

UNC. Predictably, the survey found that people who have lived in Wake County for five years or less have a significantly lower awareness of Rex than do people with deeper roots in the community. And the rate at which newcomers are arriving in Wake County is increasing all the time.

The bottom line, then, is that people who are familiar with Rex think very highly of it, but fewer and fewer people relative to the population of Wake County know anything about Rex.

"We saw from this research that there is a great opportunity to take advantage of the relationship between Rex and UNC, and this is the right time to start doing it," Schiller says.

Rex's new slogan, or tagline, which was unveiled along with the logo is: "Chosen for Excellence." That reflects both the findings of the consumer survey, Schiller said, and the expectation that more people in the future will choose Rex because of its affiliation with UNC. The tagline is a distillation of Rex's new positioning statement: "Rex Healthcare is the area's most preferred hospital combining an unparalleled reputation for quality and medical staff expertise with the technological advancements and breadth of specialties offered by UNC Health Care."

Gary Park, president of UNC Hospitals, said the purpose of the UNC-Rex partnership is not to place UNC faculty physicians in competition with independent physicians in Raleigh and Wake County.

"What we are looking to do is provide subspecialty and other complementary services for which people in Wake County have historically had to go to UNC or Duke," he says. "We would like, over time, to provide some of those services in cooperation with Rex, in concert with the medical staff there."

Strong cited the UNC Specialty Women's Center at Rex as an example of UNC's sensible and sensitive attitude toward Rex and its physicians.

"They didn't come in wanting to take over," he said. "From the beginning, UNC has wanted a partnership-oriented relationship, not a predatory relationship. UNC isn't diminishing our capabilities, but adding to what Rex can offer."

On an operational level, UNC and Rex have been collaborating for several years. For example, the two hospitals do all of their purchasing and managed care contracting together.

"We have been able to take advantage of huge opportunities in purchasing as a result of being an integrated system," says John Lewis, chief financial officer for UNC Hospitals and the former CFO at Rex. "Coordinating our managed care negotiations has enabled us to get better rates for our services."

There are still some functions, though, that need to be kept separate, Park noted.

"Strategic planning is one of those because the market for the services of an academic medical center is different from the markets that Rex is primarily serving. If there are areas where it makes sense to centralize functions, we do. If it makes sense to collaborate but not centralize, then we go in that direction."

According to Lewis, UNC Health Care likely would have found a way to extend specialty services to residents of Wake County without partnering with Rex.

"But it's good to be there with the premier tertiary hospital in the area and one of the best hospitals of any size in the state," he said.

Toppling Silos

By Edward Byrnes

Continued from page 9

By project's end, the data warehouse will take five to seven years to be fully functional at a cost of approximately $5-10 million. The costs revolve around software, hardware, implementation, and resources. Phase One of the project began with the purchase of Avega software, which handles data for financial management, budgeting, staff productivity, financial modeling, and long-range planning. Since the warehouse is made up of many parts that can become operational one by one, administrators may begin yielding results from the implementation

of Avega in just a few months.

"It's not going to be something like you flip a light switch and it's done," Kichak says. "It's more like building a skyscraper, it's going to take several years as you start at the bottom and build your way up."

Building a Bridge to Mental Health
By Angela Spivey
Continued from page 5

psychiatry clinic is a natural place to refer patients. In the near future, a patient suffering from postpartum depression can begin their treatment on the spot at the OB-GYN clinic. The OB-GYN and psychiatry departments

agreed in June 2007 to provide joint salary support for a nurse practitioner trained in both psychiatry and general obstetrics and gynecology. The practitioner will spend two days each week in OB-GYN and the remainder of the week in psychiatry.

Forming such relationships is crucial, Meltzer-Brody says, to help patients get the care they need. Most OB-GYNs don't automatically screen for postpartum depression. Screening for depression is not what OB-GYNs are trained to do; they're trained to be surgeons. In a recent study from Gaynes and Betsy Sleath, associate professor at the UNC School of Pharmacy and adjunct associate professor at the UNC School of Public Health, out of 228 North Carolina physicians who had seen women for postpartum visits, 43 percent asked women whether they felt down or depressed but 79 percent said they were not likely to use a formal screening tool for depression. OB-GYNs were even less likely to report using a formal screening tool.

David Rubinow, chair of psychiatry and director of the UNC Center for Women's Mood Disorders, would like to see a measure that all OB-GYNs in North Carolina screen for depression using a validated screening instrument on all routine postpartum visits. "I can't think of a measure that will be more cost effective or have a greater impact on the health and well-being of mothers and children than uniform screening of peri-partum women for the presence of depression," Rubinow said. A legislative measure to this effect, proposed by Rubinow and endorsed by UNC, was introduced by Rep. Verla Insko; the bill, H1963, is still under consideration by the House Appropriations Committee.

An end run to score care

Once patients have convenient access to a psychiatrist, they still have to pay for it. With current insurance and Medicaid rules, billing for psychiatric care provided in the primary care setting is a problem. Under most insurance plans, including the North Carolina State Health Plan, mental health is a so-called carve-out service; it's only covered when care is provided by designated specialty providers.

As past president of the North Carolina Academy of Family Physicians, Gwyther has been trying to get insurance rules changed so that primary care physicians are better positioned to treat mental health issues. "If any of my patients are state employees, and I was to put them on medication for depression or anxiety, the state could stiff me for that, because it specifically says in the state health contract that mental health benefits have to be provided by their designated mental health provider," Gwyther says. But the lack of psychiatrists in public health clinics means that primary care physicians are bound to see patients who need treatment for mental health issues. "So primary care physicians see them, and they bill something else instead of anxiety or depression, they may bill malaise or fatigue, which is a legitimate end run for a mental health diagnosis."

Such rules reduce the temptation for providers in a fee-for-service system to bill for procedures that aren't needed, but the rules also make it difficult to improve care, Morrissey says. "There's a logic to why there are these kinds of constraints. But this logic is really limiting the opportunities to try to integrate care. We know what to do, but our financing system doesn't allow us to do it," he says.

Smith says, "Medicaid is worried, for good financial reasons, that integrated care will cost them more money. We have to teach insurance companies both the clinical and financial value of integrated care."

In the meantime, some physicians make an end run. The grant that Shapley-Quinn secured, for example, allows the Alamance health department to provide limited mental health services to women at the prenatal clinic free of charge. But what will happen at the end of 2007 when the grant funding runs out? "After our grant year is up, we will bill Medicaid and work through the LME to hopefully cover the counselor's salary," Shapley-Quinn says.

Making Global Health Connections: North Carolina to Africa

Continued from page 15

Mina Hosseinipour, MD, is the clinical director. She is from Kentucky originally, and is an internist who trained in infectious diseases at UNC. She is based here in Malawi. David Chilongozi is the manager of research operations. He is a clinical officer (a physician assistant), who now oversees the various research projects here. Innocent Mofolo is in charge of operations, and makes the trains run on time. Arthur Sungitsa is the finance manager, and plays a key role in making sure everything gets done in a proper fashion.

Last evening we went to a wonderful dinner party at David and Rita Chilongozi's home. They have a large house, which has served them well, as they have provided care for nine nieces and nephews who were orphaned due to AIDS. There were at least 40 UNC Project staff there, and we had a "covered dish" dinner, with everyone bringing a favorite Malawian dish.

The whole menu was overseen by Godfrey, the manager and cook at the UNC Project's guesthouse. He wore a chef's jacket and hat, and really got into the role. He and I really had fun together.

We had many dishes with peanuts (they call them ground nuts) or peanut butter or peanut flour, plus chicken, fish, etc.

We also had a dish with little fish, like sardines, and even roasted termites! For dessert there was lots of fruit, including bananas, papayas, pineapple, etc. We all had a good time. It was a real team-building function.

This morning, we went to Bwaila Hospital, a local community hospital, where the UNC Project has major efforts. We observed the ante-natal clinic education, with a large number, perhaps 100, women seated outside the clinic. We had a translator for us, so we could follow what was being said in Chichewa, the Malawian language. The talk was about pregnancy, HIV, family planning, etc. At the end they sang a song—using the call and response style—about HIV prevention. It was beautiful!

Then we toured Bwaila Hospital, much of which is 70 years old. We saw the work of the BAN Study, which the UNC Project operates. It is looking at the interrelationships of breastfeeding, anti-retrovirals and nutrition.

We also saw the labor and delivery area and the newborn nursery. For this pediatrician, this was one of the highlights of the entire trip! Some of the bassinets had two or even three newborns in them, due to the crowding of the facility. The Kangaroo Care Unit was particularly interesting, where the mothers have the babies (less than 1,500 grams or about 3.3 pounds) wrapped directly on their chest/abdomen continuously, thus the name.

Back at Kamuzu Central Hospital, we went to the former leprosarium, where the UNC Project has a state-of-the-art PCR (polymerase chain reaction) facility for detecting HIV DNA and RNA in patients' blood. It is really impressive to see what dedicated staff can do out here under what must be trying conditions.

This afternoon I got a tour of KCH with Dr. Hadge Juma, the hospital director. I saw the children's ward, which has, for example, one unit with 40 beds in one open room. We saw the surgery suite, the recovery room, the step-down unit and their four-chair dialysis center.

Then we went to the adult medical wards—and saw directly what the UNC Project is doing to improve care there, especially helping Malawian doctors get trained in internal medicine in South Africa, so that care can be improved—thus boosting the work of the UNC Project, and also benefiting the people here.

Day Ten: May 31

Farewell, Malawi

It has been a glorious trip in every respect. My time in South Africa and Malawi was interesting and challenging in so many ways. I am very proud of what UNC is doing in Africa. Global health is a very important focus for our med school and our university. As I have said, it provides benefits to the people we serve in Africa, but what we learn here will benefit people around the world. And there are direct and tangible benefits for the people of North Carolina.

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Grading women's health in NORTH CAROLINA

By Carol E. Lorenz, PT, PhD

This past July, a strong contingent from the Center for Women's Health Research at UNC and its supporters arrived at the State Legislature to deliver our 2007 North Carolina Women's Health Report Card. The report card is our biennial evaluation of women's health in our state and a fair and balanced look at where we are successful and where more work is needed. North Carolina is the only state in the country that regularly prepares such a comparative report monitoring the status of women's health.

Our goal is to provide up-to-date information on the health status and health care needs of our state's 4.3 million women—and we get copies of our report card directly into the hands of more than 20,000 people who need this information: medical and public health professionals, health policy makers, researchers, healthcare payers, women's health and prevention advocacy groups, and others. You can download the report card at www.cwhr.unc.edu.

When we went to the legislature, we provided our lawmakers with a report of mixed results. The good news included a 14-percent decrease in smoking rates among all women, with fewer women smoking during pregnancy; and a continued dramatic decline in syphilis cases. Areas that have shown improvement include more women receiving breast and colorectal cancer screenings. And we give grades. Diabetes, obesity, and high cholesterol are all increasing, earning *D*s and *F*s across the board. On the other hand, 33 percent more women reported having had a Pap smear in the last two years, earning an *A* for cervical cancer prevention.

Why it's important

Despite our wealth, wonderful educational opportunities, and excellent health care facilities, North Carolina continues to rank in the bottom one-third nationally in many categories of women's health and health care. Although there has been a recent decline in the rates of heart disease and stroke deaths, North Carolina rates remain higher than the national Healthy People 2010 goals, and North Carolina continues to experience one of the highest rates of preterm birth and infant mortality in the country. To ease and finally solve these problems, we must first know about them in detail over time—which is the mission of our Report Card and an important activity for the Center for Women's Health Research at UNC.

The 2007 Report Card covers in detail all areas of health care we've documented in the past, and adds new indicators for dental health, infectious disease, and mental health. And, along with the Report Card, we are distributing a Women's Health Screening Chart that provides guidelines for monitoring and maintaining health through a series of tests from the teenage years into age 65 and beyond.

Women's health research

We sometimes point out that more money is spent betting on the Super Bowl each year than on all research for women's health combined. We need to change that equation because there are still a lot of unanswered questions: Why do women experience depression more often than men? How do fibroids affect fertility? Is there a connection between estrogen and heart disease? What causes preterm birth? The Center for Women's Health Research at UNC came into being in 2000 to help find answers to these and many other women's health questions. As part of our activities, we have coordinated over 50 federal research studies and more than 30 clinical trials, and trained over 75 masters and doctoral level candidates in research design and implementation.

The Center for Women's Health Research is improving the health and health care of women through high-quality research and translating the scientific discoveries into information for women and their health care providers. The Center is closing the gap in knowledge about health issues that touch us, our daughters, and our families every day.

Lorenz is the associate director of The Center for Women's Health Research at UNC. For more information about the Center's work, visit it on the web at www.cwhr.unc.edu. A similar version of this article originally appeared in Health & Healing in the Triangle, Vol. 10, No.1. Health & Healing, Inc., Chapel Hill, NC, publishers. Reprinted with permission.

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